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CARR & FERRELL LLP  
2200 GENG ROAD  
PALO ALTO, CA 94303

EXAMINER

HECK, MICHAEL C

ART UNIT PAPER NUMBER

3623

DATE MAILED: 08/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/608,356

Applicant(s)

SMIRNOV, YURI

Examiner

Michael C. Heck

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 35,39,40,50-110 and 114-130 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 35,39,40,50-110 and 114-130 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

✓

### **DETAILED ACTION**

1. The following is a Non-Final Office Action in response to the application filed 22 April 2005. Applicant canceled claims 111-113 and amended claims 70, 71 and 123. Currently, claims 35, 39, 40, 50-110 and 114-130 are pending and have been examined on the merits as discussed below.

2. The indicated allowability of claims 40, 61, 63, 65-67, 70, 71, 76-82, 97, 108 and 123 is withdrawn in view of the references to Henson (U.S. Patent 6,167,383), Kennedy (UK Patent Application GB 2,302,427 A), Conklin et al. (U.S. Patent 6,141,653) and Teresko et al. (Teresko et al. Calico Technology: Concinity Configuration/Quotation System, Industry Week, Vol. 245, Issue 23, 16 December 1996 [PROQUEST]); and the conclusion of the Art Unit Allowance Panel. Rejections based on the references follow.

### ***Response to Amendment***

3. The objection to the Specification in the last Office Action is withdrawn in response to the applicant's amendment to the Specification.

4. The objection to claim 71 in the last Office Action is withdrawn in response to the applicant's amendment to the claim, however there exist another duplicate phrase that needs to be deleted. Please see the claim objection below.

5. The 35 USC 112 second paragraph rejection in the last Office Action for claim 70 regarding the use of "supplier" is withdrawn in response to the applicant's amendment to the claim.

6. The 35 USC 112 second paragraph rejection in the last Office Action for claim 71 regarding the use of "supplier" is not withdrawn in response to the applicant's amendment to the claims. The applicant asserts in the remarks section of the applicants amendment that claim 71 was amended to reflect "of a supplier to the seller" to rectify the said rejection, however the claim was not amended as described by the Applicant.

7. The 35 USC 112 second paragraph rejection in the last Office Action for claim 70 regarding "a plurality of availability dates" is not withdrawn in response to the applicant's amendment to the specification.

### ***Response to Arguments***

8. Applicant's arguments filed 22 April 2005 regarding the 35 USC 112, second paragraph rejection of claim 70, have been fully considered but they are not persuasive. The claim language utilizes the phrases "an availability data" and "the availability date" of the selected feature, which is interpreted to be only one availability date of the selected feature, then is followed by the phrases "a first availability date" of the product. The last "wherein" phrase of the claim indicates "a plurality of availability dates, each of the plurality of availability dates associated with a different price of the selected feature", which implies more than one availability date for a selected feature based on price. It is not clear how the claim is to be interpreted with regard to "availability date" since no step delineates the possibility of more than one "availability date" existing for a selected feature. There is no indication or step that makes the transition from one to many.

9. Applicant's arguments filed 22 April 2005 regarding the 35 USC 103 rejection of claim 35 have been fully considered but they are not persuasive. The applicant argues that the transactions of Kennedy (UK Patent Application GB 2,302,427 A) are distinguished by the fact that they are preceded by a forecasting step. The forecasting is responsive to projected need rather than an actual customer request, and the Applicant finds this purpose to be contrary to the invention as recited in claim 35, which relates to an automated determination of supply after a selection has been received from a customer. In addition, the applicant indicates it is not clear how Kennedy teaches receiving from the manufacturer over the Internet an automated response to the communicated selected feature, the automated response including an availability date that corresponds to the selected feature.

In response, Kennedy teaches that sites 34 then places request 62 through seller 50 for the same product as request 52. If that customer request 62 is consistent with what seller 50 was forecasting, then seller 50 can reduce request 52, promise 54, and operation 56 by the amount of request 62 (p. 12, lines 22-31). That is, the manufacturer is building product to the forecast and when an actual order is received from a customer, that portion of the forecast relating to that customer is reduced and converted to an actual order with an actual promise. That is, the customer places an order and the system promises the delivery as per claim 35. Whether or not the manufacturer is building product to a forecast prior to a customer making a request does not limit Kennedy's teaching of the features of the Applicant's invention. In other words, the claim does not specifically say that manufacturing is not building deliverable product

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and is waiting for the customer order before they start building. Additionally, Kennedy teaches the promises to meet the selected forecast orders may be transmitted directly to the customer over a computer network. That is, Kennedy does not explicitly state "automated" response, however the purpose of Kennedy is to provide a system for managing available-to-promise and making promises to fulfill customer requests. Kennedy teaches that a list of all matching products and associated available-to-promises can be displayed as available-to-promise for the request. The requesting facilities and the supplying facilities may be coupled by a computer network. In environments where customers are not willing to wait for a plan to be developed to get a promise, the supplying facility must create promises in advance that are available for immediate transfer to a customer. When an actual customer request is received, one or more (or portions of) promises made to forecast requests may be instantly reassigned to the customer request. Such auto-maintenance of forecast requests can be very valuable in maintaining accurate forecasts and allocations for hundreds or thousands of products. (p. 4, lines 14-16, p. 5, lines 10-12 and 20-22, p. 6, lines 2-13, and p. 8, lines 18-20). The Examiner interprets the terms "display", "a computer network", "auto-maintenance", "immediate transfer" and "instantly reassigned" to imply an automated response system.

10. Applicant's arguments filed 22 April 2005 regarding the 35 USC 103 rejection of claim 50 have been fully considered but they are not persuasive. Applicant asserts that in Kennedy there would be no purpose to providing an "automated response" including "an availability date" in response to a customer "selected feature". In response,

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Kennedy teaches a system and method for managing available-to-promise (ATP) and making promises to fulfill customer requests (p. 1, lines 6-9). Please see the response to argument for claim 35 above.

11. Applicant's arguments filed 22 April 2005 regarding the 35 USC 103 rejection of claim 51 have been fully considered but they are not persuasive. Applicant asserts claim 51 recites "vendor" which is a further party in addition to the seller, customer and manufacturer, and the Applicant is unable to find any teachings within Kennedy that customer selection is conveyed to three additional parties other than the customer.

In response, Kennedy teaches an entire distributed organization of suppliers and customers can be modeled along with the request and promises placed between them. In this way, planners can view, manage, and plan the activity of a whole network where the interfaces between elements must be formal (separate organizations) (p. 7, lines 17-23). The Examiner interprets distributed network, whole network and separate organizations to include a vendor since one of ordinary skill in the art would know the supply chain includes the whole network of suppliers from raw material to end-item delivery.

12. Applicant's arguments filed 22 April 2005 regarding the 35 USC 103 rejection of claim 55 have been fully considered but they are not persuasive. The applicant request that the Examiner specifically point out in the cited art of both an "in-process bill of material" and "an in-process manufacturing bill of materials". In response, the Examiner interpreted the process of configuring a machine to be the process of updating an "in-process bill of material". One of ordinary skill in the art would know that

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configuring a product implies creating a bill of material for the finished item, therefore is an "in-process bill of material". Kennedy teaches the manufacturer builds product. One of ordinary skill in the art would know that a manufacturer would use a manufacturing bill of material to build the product. Granted the references do not explicitly state an "in-process bill of material" and "an in-process manufacturing bill of materials", however those in the art would know that the cornerstone of product manufacturing is the bill of materials.

13. Applicant's arguments filed 22 April 2005 regarding the 35 USC 103 rejection of claim 68 have been fully considered but they are not persuasive. Please see the discussion regarding claim 35 above.

14. Applicant's arguments filed 22 April 2005 regarding the 35 USC 103 rejection of claim 69 have been fully considered but they are not persuasive. Please see the discussion regarding claim 35 above.

15. Applicant's arguments filed 22 April 2005 regarding the 35 USC 103 rejection of claim 83 have been fully considered but they are not persuasive. Please see the discussion regarding claim 35 and 51 above.

16. Applicant's arguments filed 22 April 2005 regarding the 35 USC 103 rejection of claim 85 have been fully considered but they are not persuasive. Please see the discussion regarding claim 35 above.

17. Applicant's arguments filed 22 April 2005 regarding the 35 USC 103 rejection of claim 98 have been fully considered but they are not persuasive. Please see the discussion regarding claim 35 above.



18. Applicant's arguments filed 22 April 2005 regarding the 35 USC 103 rejection of claim 39 have been fully considered but they are not persuasive. Please see the discussion regarding claim 35 and 51 above. In addition, the applicant asserts that Conklin et.al. (U.S. Patent 6,141,653) does not teach a three party negotiation, merely a two party negotiation. Even in combination, the cited art does not teach extending negotiation to involve a third party manufacturer, as recited in claim 39.

In response, the claim as written does not make clear that two or three parties are involved in the negotiation. In fact, if anything the claim implies the seller serves as the communication means between the parties of the negotiation, namely the customer and the supplier, therefore the claim is really only a two party negotiation. Further, the claim refers to only a customer, seller and supplier, not manufacturer as implied by the applicant. In the specification, the applicant states: "a manufacturer provides to the seller a price and availability quote estimating when the ordered product will be ready. The supplier can then give a price and availability quote to the customer" (p. 3, line 20-22). As indicated, supplier could mean a seller or a manufacturer, which further supports a two party negotiation. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case,

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Kennedy teaches the customer can be given an option: delivery date adjustment or price adjustment (p. 8, lines 1-12). The Examiner interprets the process of giving options as bargaining. Conklin et al. teach a multivariate negotiation engine for iterative bargaining, therefore the references are combinable since there exist a teaching, suggestion, or motivation found in the bargaining features of the references.

19. Applicant's arguments filed 22 April 2005 regarding the 35 USC 103 rejection of claim 54 have been fully considered but they are not persuasive. The Applicant asserts the cited art does not teach availability date received is responsive to a customer specified price, much less where the availability date is received from a party more than one step in the supply chain from the buyer.

In response, Conklin et al. teach a multivariate negotiation engine for iterative bargaining. The system allows a buyer/participant to search and evaluate seller information, propose and negotiate orders and counteroffers that include all desired terms. The system provides comprehensive iterative bargaining abilities for both buyers and sellers that enable them to negotiate all the terms and conditions of a transaction – not just the price. The examiner interprets terms to include availability date. Regarding multiple parties in the supply chain, Kennedy teaches an entire distributed organization of suppliers and customers can be modeled along with the request and promises placed between them. In this way, planners can view, manage, and plan the activity of a whole network where the interfaces between elements must be formal (separate organizations) (p. 7, lines 17-23). The Examiner interprets distributed network, whole

network and separate organizations to include the whole network of suppliers from raw material to end-item delivery.

20. Applicant's arguments with respect to the rejection of claim 125 under 35 USC 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Henson (U.S. Patent 6,167,383) and (UK Patent Application GB 2,302,427 A).

Please see the 35 USC 103 rejections below.

### ***Drawings***

21. The drawings are objected to because:

- On page 22, lines 16-17 of the specification, item 10 is indicated to be color and item 11 to represent the size of the monitor, however figure 5 indicates item 10 to be size and item 11 to be color.
- On page 26, lines 5-7 of the specification, the lower left item 4 represents the actual mouse housing, roller ball and cable and the lower right item 4 represents the mouse software driver, however figure 6 indicates the lower left item 4 to be the driver and the lower right item 4 to be the housing.
- Replacement Sheet representing configuration system 200 is not identified as "figure 2" as indicated in the specification on page 9, line 19.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version

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of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

22. **Claim 71** is objected to because of the following informalities: the phrase "providing to the customer a second product price associated with the second availability date of the product" is repeated in the body of the claim. Only one is required. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

23. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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24. **Claim 35, 39, 40, 68, 70, 71, 76, 83, 85, 114, 117, 121, 123 and 128** are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The flow of information from a source to a destination is not clear, therefore the claims are indefinite. The claims indicate different entities involved in the process steps to include a customer, seller, supplier, manufacturer and vendor, however not all steps indicate the parties involved in the step either alone or in combination. For example, in claim 35, the step of "receiving into a configuration application of the seller a selected feature" does not indicate from whom or what the communication was generated. That is, the customer, based on the preamble, could be assumed to be generating the selected feature. The next step is clear in that the step is "communicating from the seller to a manufacturer the selected feature", however the next step is not clear. The next step is "receiving from the manufacturer over the Internet an automated response to the communicated selected feature, the automated response including an availability date that corresponds to the selected feature" where the manufacturer generates an automatic response, but who receives the automated response is not clear, i.e., the customer or seller. The next step of "updating an in-process bill of materials to reflect the selected feature and the availability date" does not indicate who does the updating, i.e., customer, seller, manufacturer or a combination of the three entities. The Examiner notes that all claims do not indicate the same flow of information; therefore, the Examiner respectfully requests the applicant review all the claims to better identify the definiteness of the claims invention.

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25. **Claim 39, 40, 121, 123** are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims identify the situation "where customer desires are not satisfied ...", however does not indicate the criteria to indicate a customer satisfaction condition. That is, if the remaining steps are performed, no closure of the claims indicate that anything results from the process other than the communication of information. As interpreted by the Examiner, the updating of one of several bill of materials occurs during the communication process and is used to record the selected feature and/or price of the product. The bill of materials by themselves are not the end product of the process, but rather an indication of where the process is in relation to the selected feature and/or price. That is, there is no conclusion or end result of the process indicated, i.e., the customer places an order for a product with the agreed upon selected features with the agreed upon availability date and/or price, or the customer terminates the process, etc. As to claims 40, 121 and 123, the use of the term "customer desires" is not distinct, i.e., customer desires are not defined in the claim. Therefore, the Examiner has interpreted the customer desires to relate to only the availability date and/or price and that the agreed upon availability date and/or price indicates satisfaction.

26. **Claims 39, 40, 121, 123 and 128** are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The use of the term "accommodation data" or "accommodation" is not defined in the claims to distinctly

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indicate to one of ordinary skill in the art what the term means. For example, "accommodation data" could mean a counteroffer, or it could mean identifying a transportation mean that is responsive to the customer desired availability date or price constraints. Therefore, for examination purposes, the Examiner interprets "accommodation data" to be a counteroffer used in the negotiation process.

27. **Claim 39, 40, 68, 98, 115, 118, 121, 123, 125 and 128** are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims recite a "supplier" as implying a specific entity, however, "supplier" is not defined in such a way either in the specification or the claim to distinctly indicate who that may be. For example, the specification in describing the related art, indicate an entity that actually makes the product is the manufacturer and a vendor supplies raw materials to the manufacturer; and techniques involving supply chain planning (SCP) and enterprise resource planning (ERP) attempt to integrate the sellers and customers with the manufacturing environment (p. 2, lines 6-10). The applicant further states: "a manufacturer provides to the seller a price and availability quote estimating when the ordered product will be ready. The supplier can then give a price and availability quote to the customer" (p. 3, line 20-22). As indicated, supplier could mean a seller or manufacturer. The specification goes on, reiterates the distinction, and identifies three distinct classes of people or functions involved in the claimed invention by stating: "The present invention allows for greater flexibility in the relationship between consumers, product sellers and manufacturers" (p. 6, lines 1-2) with no mention of supplier,

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however, the distinction is not maintained throughout the balance of the specification. The examiner notes the applicant earlier in the specification identified the user as the consumer, i.e. customer. The applicant states the configuration system is comprised of a user interface, a configuration engine, a supplier system (e.g., a ERP/SCP system or other resource planning system), and an inventory library (p. 9, lines 19-22). The reference to ERP/SCP system or other resource planning system seems to imply a system employed by any entity associated with the supply chain process to include seller. However, the applicant does not maintain that a supplier includes the seller when describing the system configuration options. Specifically, the applicant states "those skilled in the art will recognize various other configurations that may arise depending on the nature of the business involved and the relationship between the parties involved (e.g., consumer, retailer, wholesaler, manufacturer, distributor, or vendor to manufacturer) (p. 12, amended lines 6-9). In other words, the consumer, i.e. customer, is a distinct entity and function, but the retailer, wholesaler, and distributor were not classified into a functional category, i.e., consumers, product sellers and manufacturers, as previously identified. That is, the three categories, i.e., consumers, product sellers and manufacturers, indicate a function whereas a retailer, wholesaler, manufacturer, distributor, or vendor to manufacturer indicates a "party" or type of business. In other words, any one of the businesses except consumer that are named above can perform the product seller function, manufacturer function, and/or supplier function. Therefore, for examination purposes, the Examiner interprets the claims to



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refer to the "party" or type of business and that "seller, retailer, wholesaler, manufacturer, distributor, or vendor to manufacturer" is synonymous with "supplier".

28. **Claim 70** is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim language utilizes the phrases "an availability data" and "the availability date" of the selected feature, which is interpreted to be only one availability date of the selected feature, then is followed by the phrases "a first availability date" of the product. The last "wherein" phrase of the claim indicates "a plurality of availability dates, each of the plurality of availability dates associated with a different price of the selected feature", which implies more than one availability date for a selected feature based on price. It is not clear how the claim is to be interpreted with regard to "availability date" since no step delineates the possibility of more than one "availability date" existing for a selected feature. There is no indication or step that makes the transition from one to many. Therefore, the Examiner has interpreted the availability date to mean only one availability date per selected feature with only one price.

29. **Claim 71** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 71 the applicant uses "supplier" to identify patentably distinct characteristics of a system involved in executing the claimed invention, however, those distinct organizations are not made clear in the claims as written. For example, in the specification the applicant in describing the related art describes an

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entity that actually makes the product is the manufacturer and a vendor supplies raw materials to the manufacturer; and techniques involving supply chain planning (SCP) and enterprise resource planning (ERP) attempt to integrate the sellers and customers with the manufacturing environment (p. 2, lines 6-10). The applicant further states the configuration system in accordance with one embodiment of the present invention is comprised of a user interface, a configuration engine, a supplier system (e.g., a ERP/SCP system or other resource planning system), and an inventory library (p. 9, lines 19-22). Clearly the use of ERP/SCP with the term "supplier" implies "supplier" to be any entity utilizing the system, such as customer, seller or manufacturer, therefore is not distinct in its application as implied by the claim. Therefore, for examination purposes, the examiner interprets "supplier system" to be any system involved in communication requirements between entities.

30. **Claim 76** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term "constraints" is not defined in the claim to indicate to one of ordinary skill in the art what the applicant intended. "Constraint" can mean anything that further limits the capabilities of the system, i.e., specific features, requirement date, price, delivery location, delivery method, payment options, etc. Therefore, the Examiner has interpreted constraints to be any option.

***Claim Rejections - 35 USC § 101***

31. 35 U.S.C. 101 reads as follows:

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Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

**Claims 35, 39, 40, 50-97, 114, 119-124 and 128-130** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in the statutory process claim requirements of MPEP § 2106. That is, to be statutory, a claimed computer-related process must either:

(a) result in a physical transformation outside the computer for which a practical application in the technological arts is either disclosed in the specification or would have been known to a skilled artisan, or

(b) be limited to a practical application within the technological arts.

In either case, a practical application within in the technological arts is required. That is, there is a two prong test comprising:

(1) whether the invention is within the technological arts; and

(2) whether the invention produces practical application, that is, a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For the process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts. In the present case,

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**claims 35, 39, 40, 68, 70, 71, 76, 83, 114, 121, 123 and 128** only recite an abstract idea.

As to **claim 35**, the recited steps of receiving into a configuration application of the seller a selected feature; communicating from the seller to a manufacturer the selected feature; receiving from the manufacturer over the Internet an automated response to the communicated selected feature, the automated response including an availability date that corresponds to the selected feature; and updating an in-process bill of materials to reflect the selected feature and the availability date; wherein the availability date received from the manufacturer over the Internet is provided to or by a supply chain planning (SCP) system do not apply, involve, use, or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. The method only constitutes an idea for configuring a product, therefore, is deemed to be directed to non-statutory subject matter.

As to **claim 39**, the recited steps of (a) receiving a feature selection at a seller; (b) updating an inventory library based upon the received selection to reflect constraints imposed by the received feature selection, the constraints relating to a technical feature limitation, a price limitation or availability of the configurable product; (c) providing the received selection to a supplier; (d) receiving information from the supplier comprising at least one of availability date and price for the received selection; (e) where customer desires are not satisfied, providing at least one of a customer desired availability date and a customer desired price for the selection; (f) providing accommodation data from the supplier, the accommodation data responsive to the at least one of the customer

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desired availability date and the customer desired price for the selection; and (g) updating at least one of a manufacturing bill of materials, a pricing bill of materials, and a configuration bill of materials based on the received selection; wherein the customer desires comprise either at least one of a plurality of availability dates or at least one of a plurality of prices, for the selected feature do not apply, involve, use, or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. The method only constitutes an idea for selling a configurable product, therefore, is deemed to be directed to non-statutory subject matter.

As to **claim 40**, the recited steps of (a) receiving a feature selection at a seller, the seller being a seller of the configurable product to the customer; (b) updating an inventory library based upon the received selection to reflect constraints imposed by the selection and relating to compatibility among features of the configurable product; (c) providing the received selection to a supplier of inventory to the seller; (d) receiving information from the supplier, the information comprising a plurality of availability dates and a plurality of prices for the received selection; (e) where customer desires are not satisfied, providing at least one of a customer desired availability date and a customer desired price for the received selection; (f) providing to the customer accommodation data from the supplier, the accommodation data responsive to the at least one of the customer desired availability date and the customer desired price for the selection; and (g) updating at least one of a manufacturing bill of materials, a pricing bill of materials, and a configuration bill of materials based on the received selection do not apply,

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involve, use, or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. The method only constitutes an idea for selling a configurable product, therefore, is deemed to be directed to non-statutory subject matter.

As to **claim 68**, the recited steps of receiving, from a customer, a selection of a feature of the product at a configuration application of a seller of the product, the seller being a seller of the product to the customer; communicating the received selection from the configuration application to a supplier system of a supplier to the seller; receiving from the supplier system an automated response to the communicated received selection, the automated response including an availability date of the selected feature; updating an in-process bill of materials based upon the availability date of the selected feature; and using the updated in-process bill of materials to determine a first availability date of the product, the first availability date of the product being based on at least the availability date of the selected feature; and providing the first availability date of the product to the customer do not apply, involve, use, or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. The method only constitutes an idea for configuring a product, therefore, is deemed to be directed to non-statutory subject matter.

As to **claim 70**, the recited steps of receiving, from a customer, a selection of a feature of the product at a configuration application of a seller of the product; communicating the received selection from the configuration application to a supplier system of a supplier to the seller; receiving from the supplier system an automated

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response to the communicated received selection, the automated response including an availability date of the selected feature; updating an in-process bill of materials based upon the availability date of the selected feature; and using the updated in-process bill of materials to determine a first availability date of the product, the first availability date of the product being based on at least the availability date of the selected feature; and providing the first availability date of the product to the customer, wherein the automated response includes a plurality of availability dates, each of the plurality of availability dates associated with a different price of the selected feature do not apply, involve, use, or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. The method only constitutes an idea for configuring a product, therefore, is deemed to be directed to non-statutory subject matter.

As to **claim 71**, the recited steps of receiving, from a customer, a selection of a feature of the product at a configuration application of a seller of the product; communicating the received selection from the configuration application to a supplier system; receiving from the supplier system an automated response to the communicated received selection, the automated response including an availability date of the selected feature; updating an in-process bill of materials based upon the availability date of the selected feature; and using the updated in-process bill of materials to determine a first availability date of the product, the first availability date of the product being based on at least the availability date of the selected feature; providing the first availability date of the product to the customer; providing to the

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customer a determined second availability date of the product; providing to the customer a first product price associated with the first availability date of the product; and providing to the customer a second product price associated with the second availability date of the product; wherein the automated response further includes a plurality of availability dates associated with the selected feature, each of the plurality of availability dates associated with a different price of the selected feature do not apply, involve, use, or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. The method only constitutes an idea for configuring a product, therefore, is deemed to be directed to non-statutory subject matter.

As to **claim 76**, the recited steps of receiving at a configuration engine a set of constraints defining a first set of valid configurations of a product, the product having at least a first selectable feature and a second selectable feature, the set of constraints being determined by a seller or a manufacturer; receiving at the configuration engine a customer specified constraint, the customer specified constraint being received from a customer and being received using the computer network; receiving at the configuration engine a selection of the first selectable feature, the received selection being received from the customer and being received using the computer network; determining a second set of valid configurations of the product, the second set of valid configurations being a subset of the first set of valid configurations and being constrained by the customer specified constraint and the received selection; determining at least two possible configurations of the second selectable feature that satisfy the second set of



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valid configurations of the product; and providing to the customer the determined at least two configurations of the second selectable feature, using the computer network do not apply, involve, use, or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. The method only constitutes an idea for configuring a product, therefore, is deemed to be directed to non-statutory subject matter.

As to **claim 83**, the recited steps of receiving, from a customer, a selection of a feature of the product, at a configuration application of a seller of the product, the seller being a seller of the product to the customer; communicating the received selection from the configuration application of the seller to a supplier system of a manufacturer, the manufacturer configured to supply the feature to the seller; receiving from the manufacturer an automated response to the communicated received selection, the automated response including an availability date of the selected feature or a price of the selected feature; updating an in-process bill of materials using the automated response; using the updated in-process bill of materials to determine an availability date of the product and a price of the product based on the received selection; and providing, to the customer, the determined first availability date of the product and the determined price of the product do not apply, involve, use, or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. The method only constitutes an idea for configuring a product, therefore, is deemed to be directed to non-statutory subject matter.

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As to **claim 85**, the recited steps of receiving into a configuration application of the seller a selected feature, from the customer; communicating from the seller to a manufacturer the selected feature; receiving from the manufacturer an automated response including an availability date that corresponds to the selected feature; and updating an in-process bill of materials to reflect that selected feature do not apply, involve, use, or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. The method only constitutes an idea for configuring a product, therefore, is deemed to be directed to non-statutory subject matter.

As to **claim 114**, the recited steps of responsive to the customer selecting a feature of the product, receiving at the seller an automated response from a manufacturer, the automated response including an availability date that corresponds to that selected feature; responsive to the received availability date being unsatisfactory to the customer, communicating a customer specified availability date to the manufacturer; updating an in-process bill of materials to reflect that selected feature; and in response to the customer being satisfied with the sales parameters, submitting a completed bill of materials to the manufacturer do not apply, involve, use, or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. The method only constitutes an idea for configuring a product, therefore, is deemed to be directed to non-statutory subject matter.

As to **claim 121**, the recited steps of (a) receiving at a seller a feature selection by the customer; (b) updating an inventory library based upon the received selection to

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reflect constraints imposed by the received selection; (c) providing the received selection to a supplier, the supplier being a supplier of the feature to the seller; (d) receiving information from the supplier comprising at least one of availability date and price for the received selection; (e) where customer desires are not satisfied, providing at least one of a customer desired availability date and a customer desired price for the received selection; (f) displaying accommodation data from the supplier corresponding to the customer desires; and (g) updating at least one of a manufacturing bill of materials, a pricing bill of materials, and a configuration bill of materials based on the selection do not apply, involve, use, or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. The method only constitutes an idea for selling a configurable product, therefore, is deemed to be directed to non-statutory subject matter.

As to **claim 123**, the recited steps of receiving at a seller a feature selection by the customer; updating an inventory library based upon the received selection to reflect constraints imposed by the received selection; providing the received selection to a supplier, the supplier being a supplier of the feature to the seller; receiving information from the supplier comprising at least one of availability date and price for the received selection; where customer desires are not satisfied, providing at least one of a customer desired availability date and a customer desired price for the received selection; displaying accommodation data from the supplier corresponding to the customer desires; and updating at least one of a manufacturing bill of materials, a pricing bill of materials, and a configuration bill of materials based on the selection, wherein the

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pricing bill of materials is derived from the manufacturing bill of materials do not apply, involve, use, or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. The method only constitutes an idea for selling a configurable product, therefore, is deemed to be directed to non-statutory subject matter.

As to **claim 128**, the recited steps of providing to a customer a selectable feature, and at least one of price and availability date of the selectable feature; conveying to the supplier at least one of a customer desired availability date and a customer desired price; and supplying an automated response to a seller, the automated response including an accommodation from the supplier based on the at least one of a customer desired availability date and a customer desired price do not apply, involve, use, or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. The method only constitutes an idea for selling from a supplier a product, therefore, is deemed to be directed to non-statutory subject matter.

As to technological arts recited in the preamble, mere recitation in the preamble (i.e., intended or field of use) or mere implications of employing a machine or article of manufacture to perform some or all of the recited steps does not confer statutory subject matter to an otherwise abstract idea unless there is positive recitation in the claim as a whole to breathe life and meaning into the preamble. Looking at the claims as a whole, nothing in the body of the claims recites any structure or functionality to suggest that a computer, i.e., technology, produces something that is concrete, tangible

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and useful. It is not clear as to what the computer does to achieve a practical application, i.e., nothing is done to the data. Therefore, the preamble is taken to merely recite a field of use.

Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result. In the present case, the claimed invention produces at least one of a manufacturing bill of materials, a pricing bill of materials, and a configuration bill of materials based on the received selection (i.e., repeatable, useful and tangible). However, the Examiner notes that a process that merely manipulates an abstract idea or performs a purely mathematical algorithm in non-statutory despite the fact that it might inherently have some usefulness.

Looking at the claims as a whole, nothing in the body of the claims recite any structure or functionality to suggest that a computer performs a task. In the present case, the recitation in the claims implies employing technology only in the form of receiving messages or communication from an entity. Therefore, the use of technology to communicate is considered a non-trivial usage of technology.

Although the recited process produces a useful, concrete, and tangible result, since the claimed invention, as a whole, is not within the technological arts as explained above, the same rejection as stated above for claims 35, 39, 40, 68, 70, 71, 76, 83, 85, 114, 121, 123 and 128 applies to **claims 50-67, 69, 72-75, 77-82, 84, 86-97, 119-120, 122, 124 and 129-130.**

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***Claim Rejections - 35 USC § 103***

32. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

33. **Claim 35, 50-51, 55-56, 60, 68-74, 76-87, 91-92, 96, 98-99, 103-107, 109-110, 118-119 and 125-126** are rejected under 35 U.S.C. 103(a) as being unpatentable over Henson (U.S. Patent 6,167,383) in view of Kennedy (UK Patent Application GB 2,302,427 A). Henson discloses extended product configuration techniques comprising:

- **[Claim 35]** receiving into a configuration application of the seller a selected feature (col. 2, lines 61-67, and col. 6, lines 31-43, Henson teaches a web-based online store having a user interface for enabling a custom configuration of a computer system that includes a configurator. The configurator is provided for configuring a computer system with options selected according to a prescribed user input.);
- updating an in-process bill of materials to reflect the selected feature and the availability date (col. 6, line 18-67, Henson teaches a customer of the online store can build a customer configured machine by selecting from options listed on the configuration screen. Upon obtaining a desired configuration, a customer could then select the "ADD TO CART" icon to add the configured system to the shopping cart. An on-line store application includes configuration, pricing, validation, shipment delay indication, and merchandising modules. The shipment delay indicator provides the customer with any lead-time warnings or shipment delays which would occur as a result of the selection of specific options. The warning icon and associated messaging are made present in the configurator once an update/refresh of the web page has been requested. Online shoppers can click on the warning icon and receive a manually maintained listing of all items currently marked as significantly extending system delivery with an estimated time to delivery. The Examiner interprets the process of configuring a machine to be the process of updating an in-process bill of material and that the shipment delay indication relates to the availability date of a selected feature that is maintained as part of the configured product.).

Henson fails to disclose communicating from the seller to a manufacturer the selected feature, receiving from the manufacturer over the Internet an automated response to the communicated selected feature, and wherein the availability date received from the manufacturer over the Internet is provided to or by a supply chain planning (SCP) system. Henson teaches a web-based online store and an automated response including an availability date as indicated above. Kennedy teaches at least one seller model representing a seller that is selling at least one product, the seller model operable to forecast for the at least one product and operable to choose commitment levels creating forecast requests; the forecast requests receiving promises made by supplier sites; and the promises available to the seller entity to promise to actual customer requests. The managing of a supply chain model represents a chain of supply, the supply chain model comprising: site models that represent sites having capacity and that manage material flow; and seller models that represent sellers and that manage forecasting and purchasing; wherein commitments between sites is modeled by requests and promises; and wherein the seller can post requests on behalf of sites in anticipation of future requests from the sites. The requesting facilities each store forecast orders in a memory of a computer at the requesting facility. The forecast orders include request information, which includes the quantity (or range of quantities) of product requests from the supplying facility and the date (or range of dates) it is needed. A master scheduling software system may be used to selectively plan use of, for example, manufacturing capacity or the supplying facility to meet selected forecast orders based on predetermined criteria. If a feasible and desirable plan can be devised

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that satisfies the request, then the supplier may make a promise to the customer that he supplier will satisfy the request. The promises to meet the selected forecast orders may be transmitted directly to the customers over a computer network (p. 4, lines 17-35 and p. 5, line 23 to p. 6, line 4). It would have been obvious to one of ordinary skill in the art at the time of the applicants invention to include the process of managing available-to-promise (ATP) and making promises to fulfill customer requests of Kennedy with the teaching of Henson since Henson teach responsiveness (availability and speed) to customer requests (col. 3, lines 51-54). Being responsive to customer needs and then meeting commitments is a cornerstone for companies to maintain a strong customer base. Uncertainty leads to companies being non-responsive and missing their commitments. Eliminating the uncertainty, such as, communicating the customer's demands to all concerned, allows for companies to identify issues prior to making the commitment the customer will rely on. Kennedy teaches an entire distributed organization of suppliers and customers can be modeled along with the request and promises placed between them. In this way, planners can view, manage, and plan the activity of a whole network where the interfaces between elements must be formal (separate organizations) (p. 7, lines 17-23). Henson teaches the online store advantageously improves accuracy, reliability, and overall quality of an online buying experience. The online store is optimized for responsiveness (availability and speed) to customer requests and for completeness in servicing customer demand for personal computer related information (col. 3, lines 45-54). Therefore, with issues identified



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and/or eliminated, companies can be responsive to customer demands and meet their commitments.

- **[Claim 50]** repeating the steps of receiving into a configuration application a selected feature, communicating to a manufacturer the selected feature, receiving from the manufacturer an automated response including an availability date, and updating a number of times until the configuration is complete thereby yielding a completed bill of materials (Henson: col. 6, line 18-67, Henson teaches a customer of the online store can build a customer configured machine by selecting from options listed on the configuration screen. Upon obtaining a desired configuration, a customer could then select the "ADD TO CART" icon to add the configured system to the shopping cart. An on-line store application includes configuration, pricing, validation, shipment delay indication, and merchandising modules. The shipment delay indicator provides the customer with any lead-time warnings or shipment delays which would occur as a result of the selection of specific options. The warning icon and associated messaging are made present in the configurator once an update/refresh of the web page has been requested. Online shoppers can click on the warning icon and receive a manually maintained listing of all items currently marked as significantly extending system delivery with an estimated time to delivery. The Examiner interprets the process of configuring a machine to be the process of updating an in-process bill of material and that the shipment delay indication relates to the availability date of a selected feature that is maintained as part of the configured product. Kennedy: p. 7, lines 17-23, Kennedy teaches an entire distributed organization of suppliers and customers can be modeled along with the request and promises placed between them. In this way, planners can view, manage, and plan the activity of a whole network where the interfaces between elements must be formal (separate organizations)).
- **[Claim 51]** communicating the selected feature to a vendor (Kennedy: p. 7, lines 17-23, Kennedy teaches an entire distributed organization of suppliers and customers can be modeled along with the request and promises placed between them. In this way, planners can view, manage, and plan the activity of a whole network where the interfaces between elements must be formal (separate organizations)).
- **[Claim 55]** deriving, from the in-process bill of materials, an in-process manufacturing bill of materials that reflects the received availability date that corresponds to the selected feature (Henson: col. 6, line 18-67, Henson teaches a customer of the online store can build a customer configured machine by selecting from options listed on the configuration screen. Upon obtaining a desired configuration, a customer could then select the "ADD TO

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CART" icon to add the configured system to the shopping cart. An on-line store application includes configuration, pricing, validation, shipment delay indication, and merchandising modules. The shipment delay indicator provides the customer with any lead-time warnings or shipment delays which would occur as a result of the selection of specific options. The warning icon and associated messaging are made present in the configurator once an update/refresh of the web page has been requested. Online shoppers can click on the warning icon and receive a manually maintained listing of all items currently marked as significantly extending system delivery with an estimated time to delivery. The Examiner interprets the process of configuring a machine to be the process of updating an in-process bill of material and that the shipment delay indication relates to the availability date of a selected feature that is maintained as part of the configured product.).

- **[Claim 56]** receiving a price that corresponds to the selected feature (Henson: col. 2, line 61 through to col. 3, line 12, Henson teaches a web-based online store enabling a customer to custom configure a computer system where options and a respective price for each option is presented).
- **[Claim 60]** a relationship between the customer and the seller has a configuration side associated with the customer, and a resource planning side associated with the seller, and the customer-seller relationship is respectively one of a consumer-seller relationship, a seller-supplier relationship and a supplier-vendor relationship (Kennedy: p. 4, lines 17-35 and p. 5, line 23 to p. 6, line 4, Kennedy teaches the managing of a supply chain model represents a chain of supply, the supply chain model comprising: site models that represent sites having capacity and that manage material flow; and seller models that represents sellers and that manage forecasting and purchasing; wherein commitments between sites is modeled by requests and promises; and wherein the seller can post requests on behalf of sites in anticipation of future requests from the sites. The requesting facilities each store forecast orders in a memory of a computer at the requesting facility. The forecast orders include request information, which includes the quantity (or range of quantities) of product requests from the supplying facility and the date (or range of dates) it is needed. A master scheduling software system may be used to selectively plan use of, for example, manufacturing capacity or the supplying facility to meet selected forecast orders based on predetermined criteria. If a feasible and desirable plan can be devised that satisfies the request, then the supplier may make a promise to the customer that he supplier will satisfy the request. The promises to meet the selected forecast orders may be transmitted directly to the customers over a computer network. The Examiner interprets the above relationship is a seller-supplier relationship.).

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- **[Claim 68]** receiving, from a customer, a selection of a feature of the product at a configuration application of a seller of the product, the seller being a seller of the product to the customer (Henson: col. 2, lines 61-67, and col. 6, lines 31-43, Henson teaches a web-based online store having a user interface for enabling a custom configuration of a computer system that includes a configurator. The configurator is provided for configuring a computer system with options selected according to a prescribed user input. Inherently, the on-line store application and system is of the seller of the product.);
- communicating the received selection from the configuration application to a supplier system of a supplier to the seller (Kennedy: p. 4, lines 17-35 and p. 5, line 23 to p. 6, line 4, Kennedy teaches the managing of a supply chain model represents a chain of supply, the supply chain model comprising: site models that represent sites having capacity and that manage material flow; and seller models that represents sellers and that manage forecasting and purchasing; wherein commitments between sites is modeled by requests and promises; and wherein the seller can post requests on behalf of sites in anticipation of future requests from the sites. The requesting facilities each store forecast orders in a memory of a computer at the requesting facility. The forecast orders include request information, which includes the quantity (or range of quantities) of product requests from the supplying facility and the date (or range of dates) it is needed. A master scheduling software system may be used to selectively plan use of, for example, manufacturing capacity or the supplying facility to meet selected forecast orders based on predetermined criteria. If a feasible and desirable plan can be devised that satisfies the request, then the supplier may make a promise to the customer that he supplier will satisfy the request. The promises to meet the selected forecast orders may be transmitted directly to the customers over a computer network.);
- receiving from the supplier system an automated response to the communicated received selection, the automated response including an availability date of the selected feature (Kennedy: p. 4, lines 17-35 and p. 5, line 23 to p. 6, line 4, Kennedy teaches the managing of a supply chain model represents a chain of supply, the supply chain model comprising: site models that represent sites having capacity and that manage material flow; and seller models that represents sellers and that manage forecasting and purchasing; wherein commitments between sites is modeled by requests and promises; and wherein the seller can post requests on behalf of sites in anticipation of future requests from the sites. The requesting facilities each store forecast orders in a memory of a computer at the requesting facility. The forecast orders include request information, which includes the quantity (or range of quantities) of product requests from the supplying facility and the date (or

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range of dates) it is needed. A master scheduling software system may be used to selectively plan use of, for example, manufacturing capacity or the supplying facility to meet selected forecast orders based on predetermined criteria. If a feasible and desirable plan can be devised that satisfies the request, then the supplier may make a promise to the customer that he supplier will satisfy the request. The promises to meet the selected forecast orders may be transmitted directly to the customers over a computer network.);

- updating an in-process bill of materials based upon the availability date of the selected feature (Henson: col. 5, line 55 through to col. 6, line 30, Henson teaches the configurator, shopping cart, and checkout are part of the commerce application and are driven by the database. The customer via the online store builds a custom configured machine by selecting from the options listed on the configuration screen. Upon obtaining a desired configuration, a customer adds the configured system to the shopping cart. Inherently, as the customer selects the features desired, the configuration or in-process bill of material is updated.); and
- using the updated in-process bill of materials to determine a first availability date of the product, the first availability date of the product being based on at least the availability date of the selected feature (Henson: col. 6, lines 31-67; Henson teaches an on-line store application which includes configuration, pricing, validation, shipment delay indication, and merchandising modules. The shipment delay indicator provides the customer with any lead-time warnings or shipment delays which would occur as a result of the selection of specific options. The warning icon is presented to the online shopper upon the selection of a system option that has been identified as having a significant impact on the time to delivery of the system of interest.); and
- providing the first availability date of the product to the customer (Henson: col. 6, lines 31-67, Henson teaches the online store application includes configuration, pricing, validation, shipment delay indication, and merchandising modules. Online shoppers can click on the warning icon and receive a manually-maintained listing of all items currently marked as significantly extending system delivery with an estimated time to delivery.).
- **[Claim 69]** the automated response is generated by a manufacturer of the selected feature (Kennedy: p. 4, lines 17-35 and p. 5, line 23 to p. 6, line 4, Kennedy teaches the managing of a supply chain model represents a chain of supply, the supply chain model comprising: site models that represent sites having capacity and that manage material flow; and seller models that represents sellers and that manage forecasting and purchasing; wherein

commitments between sites is modeled by requests and promises; and wherein the seller can post requests on behalf of sites in anticipation of future requests from the sites. The requesting facilities each store forecast orders in a memory of a computer at the requesting facility. The forecast orders include request information, which includes the quantity (or range of quantities) of product requests from the supplying facility and the date (or range of dates) it is needed. A master scheduling software system may be used to selectively plan use of, for example, manufacturing capacity or the supplying facility to meet selected forecast orders based on predetermined criteria. If a feasible and desirable plan can be devised that satisfies the request, then the supplier may make a promise to the customer that he supplier will satisfy the request. The promises to meet the selected forecast orders may be transmitted directly to the customers over a computer network.).

- **[Claim 70]** receiving, from a customer, a selection of a feature of the product at a configuration application of a seller of the product (Henson: col. 2, lines 61-67, and col. 6, lines 31-43, Henson teaches a web-based online store having a user interface for enabling a custom configuration of a computer system that includes a configurator. The configurator is provided for configuring a computer system with options selected according to a prescribed user input. Inherently, the on-line store application and system is of the seller of the product.);
- communicating the received selection from the configuration application to a supplier system of a supplier to the seller (Kennedy: p. 4, lines 17-35 and p. 5, line 23 to p. 6, line 4, Kennedy teaches the managing of a supply chain model represents a chain of supply, the supply chain model comprising: site models that represent sites having capacity and that manage material flow; and seller models that represents sellers and that manage forecasting and purchasing; wherein commitments between sites is modeled by requests and promises; and wherein the seller can post requests on behalf of sites in anticipation of future requests from the sites. The requesting facilities each store forecast orders in a memory of a computer at the requesting facility. The forecast orders include request information, which includes the quantity (or range of quantities) of product requests from the supplying facility and the date (or range of dates) it is needed. A master scheduling software system may be used to selectively plan use of, for example, manufacturing capacity or the supplying facility to meet selected forecast orders based on predetermined criteria. If a feasible and desirable plan can be devised that satisfies the request, then the supplier may make a promise to the customer that he supplier will satisfy the request. The promises to meet the selected forecast orders may be transmitted directly to the customers over a computer network.);

- receiving from the supplier system an automated response to the communicated received selection, the automated response including an availability date of the selected feature (Kennedy: p. 4, lines 17-35 and p. 5, line 23 to p. 6, line 4, Kennedy teaches the managing of a supply chain model represents a chain of supply, the supply chain model comprising: site models that represent sites having capacity and that manage material flow; and seller models that represents sellers and that manage forecasting and purchasing; wherein commitments between sites is modeled by requests and promises; and wherein the seller can post requests on behalf of sites in anticipation of future requests from the sites. The requesting facilities each store forecast orders in a memory of a computer at the requesting facility. The forecast orders include request information, which includes the quantity (or range of quantities) of product requests from the supplying facility and the date (or range of dates) it is needed. A master scheduling software system may be used to selectively plan use of, for example, manufacturing capacity or the supplying facility to meet selected forecast orders based on predetermined criteria. If a feasible and desirable plan can be devised that satisfies the request, then the supplier may make a promise to the customer that he supplier will satisfy the request. The promises to meet the selected forecast orders may be transmitted directly to the customers over a computer network.);
- updating an in-process bill of materials based upon the availability date of the selected feature (Henson: col. 5, line 55 through to col. 6, line 30, Henson teaches the configurator, shopping cart, and checkout are part of the commerce application and are driven by the database. The customer via the online store builds a custom configured machine by selecting from the options listed on the configuration screen. Upon obtaining a desired configuration, a customer adds the configured system to the shopping cart. Inherently, as the customer selects the features desired, the configuration or in-process bill of material is updated.); and
- using the updated in-process bill of materials to determine a first availability date of the product, the first availability date of the product being based on at least the availability date of the selected feature (Henson: col. 6, lines 31-67, Henson teaches an on-lone store application which includes configuration, pricing, validation, shipment delay indication, and merchandising modules. The shipment delay indicator provides the customer with any lead-time warnings or shipment delays which would occur as a result of the selection of specific options. The warning icon is presented to the online shopper upon the selection of a system option that has been identified as having a significant impact on the time to delivery of the system of interest.); and

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- providing the first availability date of the product to the customer (Henson: col. 6, lines 31-67, Henson teaches the online store application includes configuration, pricing, validation, shipment delay indication, and merchandising modules. Online shoppers can click on the warning icon and receive a manually-maintained listing of all items currently marked as significantly extending system delivery with an estimated time to delivery.),
- wherein the automated response includes a plurality of availability dates, each of the plurality of availability dates associated with a different price of the selected feature (Henson: col. 6, lines 18-67, Henson teaches the pricing option module includes an update price function that causes the price displayed on the configuration screen to reflect any changes made to the system options. A shipment delay indicator provides the customer with any lead-time warnings or shipment delays which would occur as a result of the selection of specific options. Online shoppers can click on a long lead-time icon that is displayed adjacent to each item affected and receive and estimated time to delivery. Kennedy: p. 4, lines 14-35, p. 5, lines 10-12 and 20-22, p. 6, lines 2-13, p. 7, line 25 to p. 8, line 20, Kennedy teaches the requesting facilities and the supplying facilities may be coupled by a computer network with at least one seller model representing a seller that is selling at least one product, the seller model operable to forecast for the at least one product and operable to choose commitment levels creating forecast requests; the forecast requests receiving promises make by supplier sites; and the promises available to the seller entity to promise to actual customer requests. A list of all matching products and associated available-to-promises can be displayed as available-to-promise for the request. In environments where customers are not willing to wait for a plan to be developed to get a promise, the supplying facility must create promises in advance that are available for immediate transfer to a customer. When an actual customer request is received, one or more (or portions of) promises made to forecast requests may be instantly reassigned to the customer request. Each sales entity defines the "products" it sells, where a product is an item priced based on the item, the quantity, the order lead time (time from accepting the order to the requested due date), and the customer. In this way, promises can be allocated for requests with particular characteristics. For example, one product may sell an item for \$5 if the order lead time is greater than 6 weeks. Another product may sell the same item for \$10 but with as short as 1 week lead time. Thus, a customer request with 6 week order lead time may be received when all allocations for that product have been consumed. However, if all the allocations for the 1 week order lead time product have not been consumed, the customer can be given the option. Such auto-maintenance of forecast requests can be very valuable in maintaining accurate forecasts and allocations for hundreds or thousands of products.)

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- **[Claim 71]** receiving, from a customer, a selection of a feature of the product at a configuration application of a seller of the product (Henson: col. 2, lines 61-67, and col. 6, lines 31-43, Henson teaches a web-based online store having a user interface for enabling a custom configuration of a computer system that includes a configurator. The configurator is provided for configuring a computer system with options selected according to a prescribed user input. Inherently, the on-line store application and system is of the seller of the product.);
- communicating the received selection from the configuration application to a supplier system (Kennedy: p. 4, lines 17-35 and p. 5, line 23 to p. 6, line 4, Kennedy teaches the managing of a supply chain model represents a chain of supply, the supply chain model comprising: site models that represent sites having capacity and that manage material flow; and seller models that represents sellers and that manage forecasting and purchasing; wherein commitments between sites is modeled by requests and promises; and wherein the seller can post requests on behalf of sites in anticipation of future requests from the sites. The requesting facilities each store forecast orders in a memory of a computer at the requesting facility. The forecast orders include request information, which includes the quantity (or range of quantities) of product requests from the supplying facility and the date (or range of dates) it is needed. A master scheduling software system may be used to selectively plan use of, for example, manufacturing capacity or the supplying facility to meet selected forecast orders based on predetermined criteria. If a feasible and desirable plan can be devised that satisfies the request, then the supplier may make a promise to the customer that he supplier will satisfy the request. The promises to meet the selected forecast orders may be transmitted directly to the customers over a computer network.);
- receiving from the supplier system an automated response to the communicated received selection, the automated response including an availability date of the selected feature (Kennedy: p. 4, lines 17-35 and p. 5, line 23 to p. 6, line 4, Kennedy teaches the managing of a supply chain model represents a chain of supply, the supply chain model comprising: site models that represent sites having capacity and that manage material flow; and seller models that represents sellers and that manage forecasting and purchasing; wherein commitments between sites is modeled by requests and promises; and wherein the seller can post requests on behalf of sites in anticipation of future requests from the sites. The requesting facilities each store forecast orders in a memory of a computer at the requesting facility. The forecast orders include request information, which includes the quantity (or range of quantities) of product requests from the supplying facility and the date (or



range of dates) it is needed. A master scheduling software system may be used to selectively plan use of, for example, manufacturing capacity or the supplying facility to meet selected forecast orders based on predetermined criteria. If a feasible and desirable plan can be devised that satisfies the request, then the supplier may make a promise to the customer that he supplier will satisfy the request. The promises to meet the selected forecast orders may be transmitted directly to the customers over a computer network.);

- updating an in-process bill of materials based upon the availability date of the selected feature (Henson: col. 5, line 55 through to col. 6, line 30, Henson teaches the configurator, shopping cart, and checkout are part of the commerce application and are driven by the database. The customer via the online store builds a custom configured machine by selecting from the options listed on the configuration screen. Upon obtaining a desired configuration, a customer adds the configured system to the shopping cart. Inherently, as the customer selects the features desired, the configuration or in-process bill of material is updated.); and
- using the updated in-process bill of materials to determine a first availability date of the product, the first availability date of the product being based on at least the availability date of the selected feature (Henson: col. 6, lines 31-67, Henson teaches an on-line store application which includes configuration, pricing, validation, shipment delay indication, and merchandising modules. The shipment delay indicator provides the customer with any lead-time warnings or shipment delays which would occur as a result of the selection of specific options. The warning icon is presented to the online shopper upon the selection of a system option that has been identified as having a significant impact on the time to delivery of the system of interest.); and
- providing the first availability date of the product to the customer (Henson: col. 6, lines 31-67, Henson teaches the online store application includes configuration, pricing, validation, shipment delay indication, and merchandising modules. Online shoppers can click on the warning icon and receive a manually-maintained listing of all items currently marked as significantly extending system delivery with an estimated time to delivery.);
- providing to the customer a second product price associated with the second availability date of the product (Kennedy: p. 7, line 25 to p. 8, line 20, Kennedy teaches each sales entity defines the "products" it sells, where a product is an item priced based on the item, the quantity, the order lead time (time from accepting the order to the requested due date), and the customer. In this way, promises can be allocated for requests with particular

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- characteristics. For example, one product may sell an item for \$5 if the order lead time is greater than 6 weeks. Another product may sell the same item for \$10 but with as short as 1 week lead time. Thus, a customer request with 6 week order lead time may be received when all allocations for that product have been consumed. However, if all the allocations for the 1 week order lead time product have not been consumed, the customer can be given the option.);
- providing to the customer a determined second availability date of the product (Kennedy: p. 7, line 25 to p. 8, line 20, Kennedy teaches each sales entity defines the "products" it sells, where a product is an item priced based on the item, the quantity, the order lead time (time from accepting the order to the requested due date), and the customer. In this way, promises can be allocated for requests with particular characteristics. For example, one product may sell an item for \$5 if the order lead time is greater than 6 weeks. Another product may sell the same item for \$10 but with as short as 1 week lead time. Thus, a customer request with 6 week order lead time may be received when all allocations for that product have been consumed. However, if all the allocations for the 1 week order lead time product have not been consumed, the customer can be given the option.);
  - providing to the customer a first product price associated with the first availability date of the product (Henson: col. 6, lines 18-67, Henson teaches the pricing option module includes an update price function that causes the price displayed on the configuration screen to reflect any changes made to the system options. A shipment delay indicator provides the customer with any lead-time warnings or shipment delays which would occur as a result of the selection of specific options. Online shoppers can click on a long lead-time icon that is displayed adjacent to each item affected and receive and estimated time to delivery.); and
  - providing to the customer a second product price associated with the second availability date of the product (Kennedy: p. 7, line 25 to p. 8, line 20, Kennedy teaches each sales entity defines the "products" it sells, where a product is an item priced based on the item, the quantity, the order lead time (time from accepting the order to the requested due date), and the customer. In this way, promises can be allocated for requests with particular characteristics. For example, one product may sell an item for \$5 if the order lead time is greater than 6 weeks. Another product may sell the same item for \$10 but with as short as 1 week lead time. Thus, a customer request with 6 week order lead time may be received when all allocations for that product have been consumed. However, if all the allocations for the 1 week order lead time product have not been consumed, the customer can be given the option.);

- wherein the automated response includes a plurality of availability dates, each of the plurality of availability dates associated with a different price of the selected feature (Henson: col. 6, lines 18-67, Henson teaches the pricing option module includes an update price function that causes the price displayed on the configuration screen to reflect any changes made to the system options. A shipment delay indicator provides the customer with any lead-time warnings or shipment delays which would occur as a result of the selection of specific options. Online shoppers can click on a long lead-time icon that is displayed adjacent to each item affected and receive and estimated time to delivery. Kennedy: p. 4, lines 14-35, p. 5, lines 10-12 and 20-22, p. 6, lines 2-13, p. 7, line 25 to p. 8, line 20, Kennedy teaches the requesting facilities and the supplying facilities may be coupled by a computer network with at least one seller model representing a seller that is selling at least one product, the seller model operable to forecast for the at least one product and operable to choose commitment levels creating forecast requests; the forecast requests receiving promises made by supplier sites; and the promises available to the seller entity to promise to actual customer requests. A list of all matching products and associated available-to-promises can be displayed as available-to-promise for the request. In environments where customers are not willing to wait for a plan to be developed to get a promise, the supplying facility must create promises in advance that are available for immediate transfer to a customer. When an actual customer request is received, one or more (or portions of) promises made to forecast requests may be instantly reassigned to the customer request. Each sales entity defines the "products" it sells, where a product is an item priced based on the item, the quantity, the order lead time (time from accepting the order to the requested due date), and the customer. In this way, promises can be allocated for requests with particular characteristics. For example, one product may sell an item for \$5 if the order lead time is greater than 6 weeks. Another product may sell the same item for \$10 but with as short as 1 week lead time. Thus, a customer request with 6 week order lead time may be received when all allocations for that product have been consumed. However, if all the allocations for the 1 week order lead time product have not been consumed, the customer can be given the option. Such auto-maintenance of forecast requests can be very valuable in maintaining accurate forecasts and allocations for hundreds or thousands of products.)
- **[Claim 72]** the first availability date of the product, determined using the updated in-process bill of materials, is further based on an availability date of another selectable feature (Henson: col. 2, line 61 through to col. 3, line 12, col. 6, lines 31-67, Henson teaches a web-based online store enabling a customer to custom configure a computer system where options and a respective price for each option is presented. The online store application

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- includes configuration, pricing, validation, shipment delay indication, and merchandising modules. Online shoppers can click on the warning icon and receive a manually maintained listing of all items currently marked as significantly extending system delivery with an estimated time to delivery.).
- **[Claim 73]** receiving, at the configuration application, a feature price that corresponds to the selected feature (Henson: col. 2, line 61 through to col. 3, line 12, Henson teaches a web-based online store enabling a customer to custom configure a computer system where options and a respective price for each option is presented).
  - **[Claim 74]** updating a product price responsive to the received feature price, and providing the updated product price to the customer (Henson: col. 6, lines 21-25, Henson teaches the pricing option module includes an update pricing function. The update price function causes the price displayed on the configuration screen to reflect any changes made to the system options).
  - **[Claim 76]** receiving at a configuration engine a set of constraints defining a first set of valid configurations of a product, the product having at least a first selectable feature and a second selectable feature, the set of constraints being determined by a seller or a manufacturer (Henson: Figure 5, col. 2, lines 65-67, col. 6, lines 19-67, col. 9, lines 19-20 and col. 7, lines 57-66, Henson teaches a configurator is provided for configuring a computer system with options selected according to a user input. A customer of the online store can build a customer configured machine by selecting from options listed on the configuration screen. The "all option" configurator view is where all system selection options are shown at the same time. The online store application includes configuration, pricing, validation, shipment delay indication, and merchandising modules. The shipment delay indicator provides the customer with any lead time warnings or shipment delays, which would occur as a result of the selection of specific options. The online store includes validation of a configuration built by a customer. Validation (or compatibility) provides the customer with a validation message indicating an occurrence of when the options selected for a particular system are not correct. In other words, the validation enhancement lets the customer know when one or more options are not compatible for one reason or another.);
  - receiving at the configuration engine a customer specified constraint, the customer specified constraint being received from a customer and being received using the computer network (Kennedy: p. 4, lines 14-16 and p. 6, lines 2-4, Kennedy teaches a system for managing available-to-promise and making promises to fulfill customer requests. The promises to meet the selected forecast orders may be transmitted directly to the customer over a

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- computer network. The Examiner interprets constraint to be the customer requests.);
- receiving at the configuration engine a selection of the first selectable feature, the received selection being received from the customer and being received using the computer network (Henson: col. 2, lines 65-67 and col. 6, lines 19-21, Henson teaches a configurator is provided for configuring a computer system with options selected according to a user input. A customer of the online store can build a customer configured machine by selecting from options listed on the configuration screen.);
  - determining a second set of valid configurations of the product, the second set of valid configurations being a subset of the first set of valid configurations and being constrained by the customer specified constraint and the received selection (Kennedy: p. 4, lines 14-35, p. 5, lines 10-12 and 20-22, p. 6, lines 2-13, p. 7, line 25 to p. 8, line 20, Kennedy teaches the requesting facilities and the supplying facilities may be coupled by a computer network with at least one seller model representing a seller that is selling at least one product, the seller model operable to forecast for the at least one product and operable to choose commitment levels creating forecast requests; the forecast requests receiving promises made by supplier sites; and the promises available to the seller entity to promise to actual customer requests. A list of all matching products and associated available-to-promises can be displayed as available-to-promise for the request. In environments where customers are not willing to wait for a plan to be developed to get a promise, the supplying facility must create promises in advance that are available for immediate transfer to a customer. When an actual customer request is received, one or more (or portions of) promises made to forecast requests may be instantly reassigned to the customer request. Each sales entity defines the "products" it sells, where a product is an item priced based on the item, the quantity, the order lead time (time from accepting the order to the requested due date), and the customer. In this way, promises can be allocated for requests with particular characteristics. For example, one product may sell an item for \$5 if the order lead time is greater than 6 weeks. Another product may sell the same item for \$10 but with as short as 1 week lead time. Thus, a customer request with 6 week order lead time may be received when all allocations for that product have been consumed. However, if all the allocations for the 1 week order lead time product have not been consumed, the customer can be given the option. Such auto-maintenance of forecast requests can be very valuable in maintaining accurate forecasts and allocations for hundreds or thousands of products.);
  - determining at least two possible configurations of the second selectable feature that satisfy the second set of valid configurations of the product

- (Kennedy: p. 4, lines 14-35, p. 5, lines 10-12 and 20-22, p. 6, lines 2-13, p. 7, line 25 to p. 8, line 20, Kennedy teaches the requesting facilities and the supplying facilities may be coupled by a computer network with at least one seller model representing a seller that is selling at least one product, the seller model operable to forecast for the at least one product and operable to choose commitment levels creating forecast requests; the forecast requests receiving promises make by supplier sites; and the promises available to the seller entity to promise to actual customer requests. A list of all matching products and associated available-to-promises can be displayed as available-to-promise for the request. In environments where customers are not willing to wait for a plan to be developed to get a promise, the supplying facility must create promises in advance that are available for immediate transfer to a customer. When an actual customer request is received, one or more (or portions of) promises made to forecast requests may be instantly reassigned to the customer request. Each sales entity defines the "products" it sells, where a product is an item priced based on the item, the quantity, the order lead time (time from accepting the order to the requested due date), and the customer. In this way, promises can be allocated for requests with particular characteristics. For example, one product may sell an item for \$5 if the order lead time is greater than 6 weeks. Another product may sell the same item for \$10 but with as short as 1 week lead time. Thus, a customer request with 6 week order lead time may be received when all allocations for that product have been consumed. However, if all the allocations for the 1 week order lead time product have not been consumed, the customer can be given the option. Such auto-maintenance of forecast requests can be very valuable in maintaining accurate forecasts and allocations for hundreds or thousands of products.); and
- providing to the customer the determined at least two configurations of the second selectable feature, using the computer network (Kennedy: p. 4, lines 14-16 and p. 6, lines 2-4, Kennedy teaches a system for managing available-to-promise and making promises to fulfill customer requests. The promises to meet the selected forecast orders may be transmitted directly to the customer over a computer network.).
  - **[Claim 77]** The customer specified constraint includes an availability date of the product (Kennedy: p. 7, line 25 to p. 8, line 20, Kennedy teaches a customer request with 6 week order lead time may be received when all allocations for that product have been consumed. However, if all the allocations for the 1 week order lead time product have not been consumed, the customer can be given the option.).
  - **[Claim 78]** the customer specified constraint includes a price of the product or a feature price (Kennedy: p. 7, line 25 to p. 8, line 20, Kennedy teaches each

sales entity defines the "products" it sells, where a product is an item priced based on the item, the quantity, the order lead time (time from accepting the order to the requested due date), and the customer. In this way, promises can be allocated for requests with particular characteristics. For example, one product may sell an item for \$5 if the order lead time is greater than 6 weeks. Another product may sell the same item for \$10 but with as short as 1 week lead time. Thus, a customer request with 6 week order lead time may be received when all allocations for that product have been consumed. However, if all the allocations for the 1 week order lead time product have not been consumed, the customer can be given the option.).

- **[Claim 79]** determining a feature price using the received selection and using the feature price to update a product price (Henson: col. 2, line 61 through to col. 3, line 12, Henson teaches a web-based online store enabling a customer to custom configure a computer system where options and a respective price for each option is presented.).
- **[Claim 80]** determining a feature availability date using the received selection, and using the feature availability date to determine a product availability date (Henson: Figure 5, col. 2, lines 65-67 and col. 6, lines 19-67, Henson teaches a configurator is provided for configuring a computer system with options selected according to a user input. A customer of the online store can build a customer configured machine by selecting from options listed on the configuration screen. The online store application includes configuration, pricing, validation, shipment delay indication, and merchandising modules. The shipment delay indicator provides the customer with any lead time warnings or shipment delays, which would occur as a result of the selection of specific options.).
- **[Claim 81]** determining at least two configurations of the second selectable feature that satisfy the second set of valid configurations includes identifying a third configuration of the second selectable feature that would be an invalid configuration due to the customer specified constraint (Henson: Figure 5, col. 2, lines 65-67, col. 6, lines 19-67, col. 9, lines 19-20 and col. 7, lines 57-66, Henson teaches a configurator is provided for configuring a computer system with options selected according to a user input. A customer of the online store can build a customer configured machine by selecting from options listed on the configuration screen. The "all option" configurator view is where all system selection options are shown at the same time. The online store application includes configuration, pricing, validation, shipment delay indication, and merchandising modules. The shipment delay indicator provides the customer with any lead time warnings or shipment delays, which would occur as a result of the selection of specific options. The online store includes validation of a configuration built by a customer. Validation (or

compatibility) provides the customer with a validation message indicating an occurrence of when the options selected for a particular system are not correct. In other words, the validation enhancement lets the customer know when one or more options are not compatible for one reason or another. Kennedy: p. 4, lines 14-35, p. 5, lines 10-12 and 20-22, p. 6, lines 2-13, p. 7, line 25 to p. 8, line 20, Kennedy teaches the requesting facilities and the supplying facilities may be coupled by a computer network with at least one seller model representing a seller that is selling at least one product, the seller model operable to forecast for the at least one product and operable to choose commitment levels creating forecast requests; the forecast requests receiving promises make by supplier sites; and the promises available to the seller entity to promise to actual customer requests. A list of all matching products and associated available-to-promises can be displayed as available-to-promise for the request. In environments where customers are not willing to wait for a plan to be developed to get a promise, the supplying facility must create promises in advance that are available for immediate transfer to a customer. When an actual customer request is received, one or more (or portions of) promises made to forecast requests may be instantly reassigned to the customer request. Each sales entity defines the "products" it sells, where a product is an item priced based on the item, the quantity, the order lead time (time from accepting the order to the requested due date), and the customer. In this way, promises can be allocated for requests with particular characteristics. For example, one product may sell an item for \$5 if the order lead time is greater than 6 weeks. Another product may sell the same item for \$10 but with as short as 1 week lead time. Thus, a customer request with 6 week order lead time may be received when all allocations for that product have been consumed. However, if all the allocations for the 1 week order lead time product have not been consumed, the customer can be given the option. Such auto-maintenance of forecast requests can be very valuable in maintaining accurate forecasts and allocations for hundreds or thousands of products.).

- **[Claim 82]** receiving at the configuration engine a feature availability date from a supply system of a manufacturer (Kennedy: p. 4, lines 14-35, p. 5, lines 10-12 and 20-22, p. 6, lines 2-13, Kennedy teaches the requesting facilities and the supplying facilities may be coupled by a computer network with at least one seller model representing a seller that is selling at least one product, the seller model operable to forecast for the at least one product and operable to choose commitment levels creating forecast requests; the forecast requests receiving promises make by supplier sites; and the promises available to the seller entity to promise to actual customer requests. A list of all matching products and associated available-to-promises can be displayed as available-to-promise for the request. In environments where customers are not willing to wait for a plan to be developed to get a promise,



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the supplying facility must create promises in advance that are available for immediate transfer to a customer. When an actual customer request is received, one or more (or portions of) promises made to forecast requests may be instantly reassigned to the customer request.).

- **[Claim 83]** receiving, from a customer, a selection of a feature of the product, at a configuration application of a seller of the product (Henson: col. 2, lines 61-67, and col. 6, lines 31-43, Henson teaches a web-based online store having a user interface for enabling a custom configuration of a computer system that includes a configurator. The configurator is provided for configuring a computer system with options selected according to a prescribed user input. Inherently, the on-line store application and system is of the seller of the product.);
- communicating the received selection from the configuration application to a supplier system of a manufacturer (Kennedy: p. 4, lines 17-35 and p. 5, line 23 to p. 6, line 4, Kennedy teaches the managing of a supply chain model represents a chain of supply, the supply chain model comprising: site models that represent sites having capacity and that manage material flow; and seller models that represents sellers and that manage forecasting and purchasing; wherein commitments between sites is modeled by requests and promises; and wherein the seller can post requests on behalf of sites in anticipation of future requests from the sites. The requesting facilities each store forecast orders in a memory of a computer at the requesting facility. The forecast orders include request information, which includes the quantity (or range of quantities) of product requests from the supplying facility and the date (or range of dates) it is needed. A master scheduling software system may be used to selectively plan use of, for example, manufacturing capacity or the supplying facility to meet selected forecast orders based on predetermined criteria. If a feasible and desirable plan can be devised that satisfies the request, then the supplier may make a promise to the customer that he supplier will satisfy the request. The promises to meet the selected forecast orders may be transmitted directly to the customers over a computer network.);
- receiving from the manufacturer an automated response to the communicated received selection, the automated response including an availability date of the selected feature or a price of the selected feature (Kennedy: p. 4, lines 17-35 and p. 5, line 23 to p. 6, line 4, Kennedy teaches the managing of a supply chain model represents a chain of supply, the supply chain model comprising: site models that represent sites having capacity and that manage material flow; and seller models that represents sellers and that manage forecasting and purchasing; wherein commitments between sites is modeled by requests and promises; and wherein the seller

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can post requests on behalf of sites in anticipation of future requests from the sites. The requesting facilities each store forecast orders in a memory of a computer at the requesting facility. The forecast orders include request information, which includes the quantity (or range of quantities) of product requests from the supplying facility and the date (or range of dates) it is needed. A master scheduling software system may be used to selectively plan use of, for example, manufacturing capacity or the supplying facility to meet selected forecast orders based on predetermined criteria. If a feasible and desirable plan can be devised that satisfies the request, then the supplier may make a promise to the customer that he supplier will satisfy the request. The promises to meet the selected forecast orders may be transmitted directly to the customers over a computer network.);

- updating an in-process bill of materials using the automated response (Henson: col. 5, line 55 through to col. 6, line 30, Henson teaches the configurator, shopping cart, and checkout are part of the commerce application and are driven by the database. The customer via the online store builds a custom configured machine by selecting from the options listed on the configuration screen. Upon obtaining a desired configuration, a customer adds the configured system to the shopping cart. Inherently, as the customer selects the features desired, the configuration or in-process bill of material is updated.);
- using the updated in-process bill of materials to determine an availability date of the product and a price of the product based on the received selection (Henson: col. 2, line 61 through to col. 3, line 12, col. 6, lines 31-67, Henson teaches a web-based online store enabling a customer to custom configure a computer system where options and a respective price for each option is presented. The online store application includes configuration, pricing, validation, shipment delay indication, and merchandising modules. Online shoppers can click on the warning icon and receive a manually maintained listing of all items currently marked as significantly extending system delivery with an estimated time to delivery.); and
- providing, to the customer, the determined first availability date of the product and the determined price of the product (Henson: col. 6, lines 31-67, Henson teaches the online store application includes configuration, pricing, validation, shipment delay indication, and merchandising modules. Online shoppers can click on the warning icon and receive a manually-maintained listing of all items currently marked as significantly extending system delivery with an estimated time to delivery.).
- **[Claim 84]** communicating the received selection from the configuration system to the supplier system includes communicating using the Internet

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(Henson: col. 5, line 66 to col. 6, line 1, Henson teaches a customer can access the online store using any suitable computer equipment, via the Internet.).

- **[Claim 85]** receiving into a configuration application of the seller a selected feature, from the customer (Henson: col. 2, lines 61-67, and col. 6, lines 31-43, Henson teaches an online store application and system which includes a configuration module. The web-based online store has a user interface for enabling a custom configuration of a computer system based on the options selected according to a prescribed user input.);
- communicating from the seller to a manufacturer the selected feature (Kennedy: p. 4, lines 17-35 and p. 5, line 23 to p. 6, line 4, Kennedy teaches the managing of a supply chain model represents a chain of supply, the supply chain model comprising: site models that represent sites having capacity and that manage material flow; and seller models that represents sellers and that manage forecasting and purchasing; wherein commitments between sites is modeled by requests and promises; and wherein the seller can post requests on behalf of sites in anticipation of future requests from the sites. The requesting facilities each store forecast orders in a memory of a computer at the requesting facility. The forecast orders include request information, which includes the quantity (or range of quantities) of product requests from the supplying facility and the date (or range of dates) it is needed. A master scheduling software system may be used to selectively plan use of, for example, manufacturing capacity or the supplying facility to meet selected forecast orders based on predetermined criteria. If a feasible and desirable plan can be devised that satisfies the request, then the supplier may make a promise to the customer that he supplier will satisfy the request. The promises to meet the selected forecast orders may be transmitted directly to the customers over a computer network.);
- receiving from the manufacturer an automated response including an availability date that corresponds to the selected feature (Kennedy: p. 4, lines 17-35 and p. 5, line 23 to p. 6, line 4, Kennedy teaches the managing of a supply chain model represents a chain of supply, the supply chain model comprising: site models that represent sites having capacity and that manage material flow; and seller models that represents sellers and that manage forecasting and purchasing; wherein commitments between sites is modeled by requests and promises; and wherein the seller can post requests on behalf of sites in anticipation of future requests from the sites. The requesting facilities each store forecast orders in a memory of a computer at the requesting facility. The forecast orders include request information, which includes the quantity (or range of quantities) of product requests from the supplying facility and the date (or range of dates) it is needed. A master

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scheduling software system may be used to selectively plan use of, for example, manufacturing capacity or the supplying facility to meet selected forecast orders based on predetermined criteria. If a feasible and desirable plan can be devised that satisfies the request, then the supplier may make a promise to the customer that he supplier will satisfy the request. The promises to meet the selected forecast orders may be transmitted directly to the customers over a computer network.); and

- updating an in-process bill of materials to reflect that selected feature (Henson: col. 5, line 55 through to col. 6, line 30, Henson teaches the configurator, shopping cart, and checkout are part of the commerce application and are driven by the database. The customer via the online store builds a custom configured machine by selecting from the options listed on the configuration screen. Upon obtaining a desired configuration, a customer adds the configured system to the shopping cart. Inherently, as the customer selects the features desired, the in-process configuration or bill of material is updated.);
- **[Claim 98]** a configuration application of a seller configured for receiving a selection of a feature of the product from a customer, and for validating a number of constraints associated with the selected feature, the constraints relating to compatibility between the selected feature and other features of the product or availability of the product including the selected feature, the seller being a seller of the product to the customer (Henson: Figure 1, col. 2, lines 65-67, and col. 7, lines 57-66, Henson teaches a configurator is provided for configuring a computer system with options selected according to a user input. The online store includes validation of a configuration built by a customer whereby a validation message is sent indicating an occurrence of when the options selected are not correct or will adversely affect the shipment.);
- a communication module coupled to the configuration application for communicating the selected feature from the seller to a supplier, and for receiving over the internet an availability date of the selected feature from the supplier to the configuration application, the supplier being a supplier of the selected feature to the seller (Henson: Figure 1, col. 4, lines 53-62 and col. 6, lines 31-67, Henson teaches an enhanced online store user interface which enables the system configuration, pricing, and ordering of a computer system via the Internet. The online store has a shipment delay indicator that provides the customer with advance notice that a particular option will result in a shipment delay. The indicator may further include an indication of a certain amount of time for a delay with an estimated time to delivery. Kennedy: p. 4, lines 17-35 and p. 5, line 23 to p. 6, line 4, Kennedy teaches the managing of a supply chain model represents a chain of supply, the supply chain model

comprising: site models that represent sites having capacity and that manage material flow; and seller models that represents sellers and that manage forecasting and purchasing; wherein commitments between sites is modeled by requests and promises; and wherein the seller can post requests on behalf of sites in anticipation of future requests from the sites. The requesting facilities each store forecast orders in a memory of a computer at the requesting facility. The forecast orders include request information, which includes the quantity (or range of quantities) of product requests from the supplying facility and the date (or range of dates) it is needed. A master scheduling software system may be used to selectively plan use of, for example, manufacturing capacity or the supplying facility to meet selected forecast orders based on predetermined criteria. If a feasible and desirable plan can be devised that satisfies the request, then the supplier may make a promise to the customer that he supplier will satisfy the request. The promises to meet the selected forecast orders may be transmitted directly to the customers over a computer network.); and

- a first storage area coupled to one of the configuration application and the communication module for storing an in-process bill of materials that reflects the selected feature (Henson: Figure 1, col. 3, lines 4-6, and col. 5, lines 9-13, and 57-58, Henson teaches the configurator, cart, and checkout are driven off the database. The cart provides temporary storage of the customer configured computer system.).
- **[Claim 104]** a second storage area coupled to one of the configuration application and the communication module for storing an in-process manufacturing bill of materials that reflects the availability date of the selected product feature; and a third storage area coupled to one of the configuration application and the communication module for storing an in-process pricing bill of materials that reflects a price of the selected product feature (Henson: Figure 1 and 11, col. 4, line 53 through to col. 5, line 5, and col. 6, lines 5-51, Henson teaches a hard disk drive and other storage devices all interconnected via one or more buses. The commerce application includes a configurator and database. The database provides information to the configurator which includes a pricing module, a view module, a lead time warning module, and a merchandising module.)
- **[Claim 105]** the communication module is also for communicating a price of the selected product feature from the supplier to the configuration application (Henson: Figure 1, col. 2, line 61 through to col. 3, line 11, Henson teaches a commerce application where options selected by the user receive a price that is displayed on a configurator web page).

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- **[Claim 106]** an availability date communication module for communicating the availability date of the selected product feature from the supplier to the configuration application (Henson: Figure 1, col. 6, lines 31-67, Henson teaches a lead time module with a shipment delay indicator that provides the customer with any lead time warnings or shipment delays associated with selection of specific options);
- and a price communication module for communicating the price of the selected product feature to the configuration application (Henson: Figure 1, col. 2, line 61 through to col. 3, line 12, Henson teaches pricing module as part of a web-based online store enabling a customer to custom configure a computer system where options and a respective price for each option is presented).
- **[Claim 109]** a user interface coupled to the configuration application for allowing the customer to interact with the system (Henson: Figure 11, col. 2, lines 61-67, Henson teaches a web-based online store having a user interface for enabling a custom configuration of a computer system).
- **[Claim 110]** an inventory library coupled to the configuration application for providing the customer a number of the configurable features that can be selected to configure the product (Henson: Figure 1, col. 3, lines 13-29, Henson teaches the configurator coupled to a database and includes merchandising recommendations for available options that are presented on the configurator web page. The examiner interprets the database to be the inventory library.).
- **[Claim 119]** the availability date received from the manufacturer over the Internet is provided by an enterprise resource planning (ERP) system (Henson: col. 2, line 61 through to col. 3, line 12, and col. 6, lines 31-67, Henson teaches a web-based online store enabling a customer to custom configure a computer system where options and a respective price for each option is presented. A shipment delay indicator provides the customer with any lead-time warnings or shipment delays associated with the selection of specific options and when the shopper clicks on the icon will receive an estimated time to delivery. Kennedy: p. 4, lines 17-35 and p. 5, line 23 to p. 6, line 4, Kennedy teaches the managing of a supply chain model represents a chain of supply, the supply chain model comprising: site models that represent sites having capacity and that manage material flow; and seller models that represents sellers and that manage forecasting and purchasing; wherein commitments between sites is modeled by requests and promises; and wherein the seller can post requests on behalf of sites in anticipation of future requests from the sites. The requesting facilities each store forecast orders in a memory of a computer at the requesting facility. The forecast

orders include request information, which includes the quantity (or range of quantities) of product requests from the supplying facility and the date (or range of dates) it is needed. The Examiner interprets a supply chain model to be an enterprise resource planning (ERP) system.).

- **[Claim 125]** an inventory library coupled to a configuration engine of a seller of the configurable product, the inventory library configured for providing the catalog of selectable features, the catalog of selectable features corresponding to a particular configurable product (Henson: col. 3, lines 8-16 and col. 5, lines 57-58, Henson teaches the database is provided for dynamically supplying configuration options to the configurator in accordance with the identification of the user belonging to the prescribed customer set. The configurator further includes merchandising recommendations for available options and their respective option details, the merchandizing recommendations being presented on the configurator web page. The entire configurator is being driven by the database.);
- a user interface coupled to the configuration engine using the Internet, the user interface for displaying the catalog of selectable features and for receiving customer desires (Henson: col. 4, lines 60-62 and col. 6, lines 18-21, Henson teaches an enhanced online store user interface, which advantageously enables the system configuration, pricing, and ordering of a computer system via the Internet. A customer of the online store can build a customer configured machine by selecting from options listed on the configuration screen.); and
- a supplier system coupled to the configuration engine using the Internet, the supplier system being associated with a supplier of the at least one feature to the seller of the configurable product and being configured for providing at least one of availability information and price information to at least one of the user interface, the configuration engine, and the inventory library, and for providing accommodation data to the configuration engine in automated response to customer desires communicated to the supplier system, the configuration engine for validating the customer desires against constraints associated with the selectable features, for determining whether the at least one of availability information and price information meet customer desires, and for communicating specific customer desires to the supplier system (Henson: Figure 1, col. 4, lines 53-62, col. 5, line 55 through to col. 6, line 67, and col. 7, lines 57-61, Henson teaches an enhanced online store user interface which enables the system configuration, pricing, and ordering of a computer system via the Internet. The configurator, shopping cart, and checkout are part of the commerce application and are driven by the database. The customer via the online store builds a custom configured machine by selecting from the options listed on the configuration screen.

Upon obtaining a desired configuration, a customer adds the configured system to the shopping cart. An on-line store application includes configuration, pricing, validation, shipment delay indication, and merchandising modules. The shipment delay indicator provides the customer with any lead-time warnings or shipment delays which would occur as a result of the selection of specific options. The warning icon and associated messaging are made present in the configurator once an update/refresh of the web page has been requested. Online shoppers can click on the warning icon and receive a manually maintained listing of all items currently marked as significantly extending system delivery with an estimated time to delivery. The indicator may further include an indication of a certain amount of time for a delay with an estimated time to delivery. Validation (or compatibility) provides the customer with a validation message indicating an occurrence of when the options selected for a particular system are not correct. Kennedy: p. 4, lines 14-35, p. 5, lines 10-12 and 20-22, p. 6, lines 2-13, p. 7, line 25 to p. 8, line 20, Kennedy teaches the requesting facilities and the supplying facilities may be coupled by a computer network with at least one seller model representing a seller that is selling at least one product, the seller model operable to forecast for the at least one product and operable to choose commitment levels creating forecast requests; the forecast requests receiving promises made by supplier sites; and the promises available to the seller entity to promise to actual customer requests. A list of all matching products and associated available-to-promises can be displayed as available-to-promise for the request. The managing of a supply chain model represents a chain of supply, the supply chain model comprising: site models that represent sites having capacity and that manage material flow; and seller models that represent sellers and that manage forecasting and purchasing; wherein commitments between sites is modeled by requests and promises; and wherein the seller can post requests on behalf of sites in anticipation of future requests from the sites. The requesting facilities each store forecast orders in a memory of a computer at the requesting facility. The forecast orders include request information, which includes the quantity (or range of quantities) of product requests from the supplying facility and the date (or range of dates) it is needed. A master scheduling software system may be used to selectively plan use of, for example, manufacturing capacity or the supplying facility to meet selected forecast orders based on predetermined criteria. If a feasible and desirable plan can be devised that satisfies the request, then the supplier may make a promise to the customer that he supplier will satisfy the request. The promises to meet the selected forecast orders may be transmitted directly to the customers over a computer network. In environments where customers are not willing to wait for a plan to be developed to get a promise, the supplying facility must create promises in advance that are available for immediate transfer to a customer. When an actual customer request is received, one or more (or portions of) promises



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made to forecast requests may be instantly reassigned to the customer request. Each sales entity defines the "products" it sells, where a product is an item priced based on the item, the quantity, the order lead time (time from accepting the order to the requested due date), and the customer. In this way, promises can be allocated for requests with particular characteristics. For example, one product may sell an item for \$5 if the order lead time is greater than 6 weeks. Another product may sell the same item for \$10 but with as short as 1 week lead time. Thus, a customer request with 6 week order lead time may be received when all allocations for that product have been consumed. However, if all the allocations for the 1 week order lead time product have not been consumed, the customer can be given the option. Such auto-maintenance of forecast requests can be very valuable in maintaining accurate forecasts and allocations for hundreds or thousands of products.)

- **[Claim 126]** wherein the user interface, configuration engine, and supplier system are remotely located with respect to each other (Henson: col. 2, lines 61-65, Henson teaches a web-based online store having a user interface for enabling a custom configuration of a computer system. Kennedy: p. 7, lines 18-20, Kennedy teaches an entire distributed organization of suppliers and customers can be modeled along with the requests and promises placed between them.).

**Claims 86-87, 91-92, 96, 99, 103, 107, and 118** substantially recite the same limitations as that of claims 50-52, 55-56, 60 and 98 with the distinction of the recited method being a method and a system. Hence the same rejection for claims 50-52, 55-56, 60 and 98 as applied above applies to claims 86-87, 91-92, 96, 99, 103, 107, and 118.

34. **Claims 39-40, 52-54, 57-59, 62, 64-65, 67, 75, 88-90, 93-95, 100-102, 114-117, 120-122, 124 and 127-130** are rejected under 35 U.S.C. 103(a) as being unpatentable over Henson (U.S. Patent 6,167,383) and Kennedy (UK Patent Application GB 2,302,427 A) in view of Conklin et al. (U.S. Patent 6,141,653). Henson and Kennedy disclose extended product configuration techniques comprising:

- **[Claim 39]** receiving a feature selection at a seller (Henson: col. 2, lines 61-67, and col. 6, lines 31-43, Henson teaches an online store application and

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- system which includes a configuration module. The web-based online store has a user interface for enabling a custom configuration of a computer system based on the options selected according to a prescribed user input.);
- updating an inventory library based upon the received selection to reflect constraints imposed by the received feature selection, the constraints relating to a technical feature limitation, a price limitation or availability of the configurable product (Henson: col. 5, line 55 through to col. 6, line 67 , Henson teaches the configurator, shopping cart, and checkout are part of the commerce application and are driven by the database. The customer via the online store builds a custom configured machine by selecting from the options listed on the configuration screen. Upon obtaining a desired configuration, a customer adds the configured system to the shopping cart. An on-line store application includes configuration, pricing, validation, shipment delay indication, and merchandising modules. The shipment delay indicator provides the customer with any lead-time warnings or shipment delays which would occur as a result of the selection of specific options. The warning icon and associated messaging are made present in the configurator once an update/refresh of the web page has been requested. Online shoppers can click on the warning icon and receive a manually maintained listing of all items currently marked as significantly extending system delivery with an estimated time to delivery.);
  - providing the received selection to a supplier (Kennedy: p. 4, lines 17-35, Kennedy teaches at least one seller model representing a seller that is selling at least one product, the seller model operable to forecast for the at least one product and operable to choose commitment levels creating forecast requests; the forecast requests receiving promises made by supplier sites; and the promises available to the seller entity to promise to actual customer requests.);
  - receiving information from the supplier comprising at least one of availability date and price for the received selection (Henson: col. 6, lines 18-67, Henson teaches the pricing option module includes an update price function that causes the price displayed on the configuration screen to reflect any changes made to the system options. A shipment delay indicator provides the customer with any lead-time warnings or shipment delays which would occur as a result of the selection of specific options. Online shoppers can click on a long lead-time icon that is displayed adjacent to each item affected and receive an estimated time to delivery. Kennedy: p. 4, lines 17-35, Kennedy teaches at least one seller model representing a seller that is selling at least one product, the seller model operable to forecast for the at least one product and operable to choose commitment levels creating forecast requests; the forecast requests receiving promises made by supplier sites; and the

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- promises available to the seller entity to promise to actual customer requests.);
- updating at least one of a manufacturing bill of materials, a pricing bill of materials, and a configuration bill of materials based on the received selection (Henson: col. 5, line 55 through to col. 6, line 30, Henson teaches the configurator, shopping cart, and checkout are part of the commerce application and are driven by the database. The customer via the online store builds a custom configured machine by selecting from the options listed on the configuration screen. Upon obtaining a desired configuration, a customer adds the configured system to the shopping cart. Inherently, as the customer selects the features desired, the in-process configuration or configuration bill of material is updated.);
  - **[Claim 40]** receiving a feature selection at a seller, the seller being a seller of the configurable product to the customer (Henson: col. 2, lines 61-67, and col. 6, lines 31-43, Henson teaches an online store application and system which includes a configuration module. The web-based online store has a user interface for enabling a custom configuration of a computer system based on the options selected according to a prescribed user input.);
  - updating an inventory library based upon the received selection to reflect constraints imposed by the selection and relating compatibility among features of the configurable product (Henson: col. 5, line 55 through to col. 6, line 67, and col. 7, lines 57-61, Henson teaches the configurator, shopping cart, and checkout are part of the commerce application and are driven by the database. The customer via the online store builds a custom configured machine by selecting from the options listed on the configuration screen. Upon obtaining a desired configuration, a customer adds the configured system to the shopping cart. An on-line store application includes configuration, pricing, validation, shipment delay indication, and merchandising modules. The shipment delay indicator provides the customer with any lead-time warnings or shipment delays which would occur as a result of the selection of specific options. The warning icon and associated messaging are made present in the configurator once an update/refresh of the web page has been requested. Online shoppers can click on the warning icon and receive a manually maintained listing of all items currently marked as significantly extending system delivery with an estimated time to delivery. Validation (or compatibility) provides the customer with a validation message indicating an occurrence of when the options selected for a particular system are not correct.);
  - providing the received selection to a supplier of inventory to the seller (Kennedy: p. 4, lines 17-35, Kennedy teaches at least one seller model

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- representing a seller that is selling at least one product, the seller model operable to forecast for the at least one product and operable to choose commitment levels creating forecast requests; the forecast requests receiving promises made by supplier sites; and the promises available to the seller entity to promise to actual customer requests.);
- receiving information from the supplier, the information comprising a plurality of availability dates and a plurality of prices for the received selection (Henson: col. 6, lines 18-67, Henson teaches the pricing option module includes an update price function that causes the price displayed on the configuration screen to reflect any changes made to the system options. A shipment delay indicator provides the customer with any lead-time warnings or shipment delays which would occur as a result of the selection of specific options. Online shoppers can click on a long lead-time icon that is displayed adjacent to each item affected and receive an estimated time to delivery. Kennedy: p. 4, lines 14-35, p. 5, lines 10-12 and 20-22, p. 6, lines 2-13, and p. 8, lines 18-20, Kennedy teaches the requesting facilities and the supplying facilities may be coupled by a computer network with at least one seller model representing a seller that is selling at least one product, the seller model operable to forecast for the at least one product and operable to choose commitment levels creating forecast requests; the forecast requests receiving promises made by supplier sites; and the promises available to the seller entity to promise to actual customer requests. A list of all matching products and associated available-to-promises can be displayed as available-to-promise for the request. In environments where customers are not willing to wait for a plan to be developed to get a promise, the supplying facility must create promises in advance that are available for immediate transfer to a customer. When an actual customer request is received, one or more (or portions of) promises made to forecast requests may be instantly reassigned to the customer request. Such auto-maintenance of forecast requests can be very valuable in maintaining accurate forecasts and allocations for hundreds or thousands of products.);
  - updating at least one of a manufacturing bill of materials, a pricing bill of materials, and a configuration bill of materials based on the received selection (Henson: col. 5, line 55 through to col. 6, line 30, Henson teaches the configurator, shopping cart, and checkout are part of the commerce application and are driven by the database. The customer via the online store builds a custom configured machine by selecting from the options listed on the configuration screen. Upon obtaining a desired configuration, a customer adds the configured system to the shopping cart. Inherently, as the customer selects the features desired, the in-process configuration or configuration bill of material is updated.).

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Henson and Kennedy fail to teach that where customer desires are not satisfied, providing at least one of a customer desired availability date and a customer desired price for the received selection; providing to the customer accommodation data from the supplier, the accommodation data responsive to at least one of the customer desired availability date and the customer desired price for the selection; and wherein the customer desires comprise either at least one of a plurality of availability dates or at least one of a plurality of prices for the selected feature. Conklin et al. teaches a multivariate negotiation engine for iterative bargaining. The system allows a buyer/participant to search and evaluate seller information, propose and negotiate orders and counteroffers that include all desired terms. The system provides comprehensive iterative bargaining abilities for both buyers and sellers that enable them to negotiate all the terms and conditions of a transaction – not just the price. An internal database contains the history of all transactions, so that sponsors, buyers, and sellers may retrieve appropriate records to document each stage of interaction and negotiation (col. 13, line 66 through to col. 14, line 31). The examiner interprets “iterative” in this application to mean repeating the process in which a plurality of availability dates and/or a plurality of prices are displayed over a period of time and recorded until the process is complete. It is old and well known in the negotiation art to negotiate both price and delivery of product concurrently. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to include a multivariate negotiation engine with Henson and Kennedy since Kennedy teaches the customer may be able to choose to have it for a low price but a week later than requested, or by the date

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requested but 10% higher price. (p. 17, lines 19-21). Companies realize the cost advantage of doing business over the Internet. Allowing the customer to negotiate price, terms, conditions, etc. over the Internet would minimize the need for the customer to physically go to a company's place of business. The customer having the ability to negotiate all aspects of doing business with the company over the Internet would reduce the overall cost of the transaction for both the customer and company.

- **[Claim 52]** in response to the received availability date being unsatisfactory to the customer, communicating a customer specified availability date to at least one of the seller and manufacturer (Conklin et al.: col. 13, line 66 through to col. 14, line 31, Conklin et al. teach a multivariate negotiation engine for iterative bargaining. The system allows a buyer/participant to search and evaluate seller information, propose and negotiate orders and counteroffers that include all desired terms. The system provides comprehensive iterative bargaining abilities for both buyers and sellers that enable them to negotiate all the terms and conditions of a transaction – not just the price. The examiner interprets terms to include availability date.).
- **[Claim 53]** wherein the availability date received from the manufacturer is in response to a customer specified availability date communicated to at least one of the seller and manufacturer (Conklin et al.: col. 13, line 66 through to col. 14, line 31, Conklin et al. teach a multivariate negotiation engine for iterative bargaining. The system allows a buyer/participant to search and evaluate seller information, propose and negotiate orders and counteroffers that include all desired terms. The system provides comprehensive iterative bargaining abilities for both buyers and sellers that enable them to negotiate all the terms and conditions of a transaction – not just the price. The examiner interprets terms to include availability date.).
- **[Claim 54]** wherein the availability date received from the manufacturer is in response to a customer specified price communicated to at least one of the seller and manufacturer (Conklin et al.: col. 13, line 66 through to col. 14, line 31, Conklin et al. teach a multivariate negotiation engine for iterative bargaining. The system allows a buyer/participant to search and evaluate seller information, propose and negotiate orders and counteroffers that include all desired terms. The system provides comprehensive iterative bargaining abilities for both buyers and sellers that enable them to negotiate all the terms and conditions of a transaction – not just the price. The examiner interprets terms to include availability date.).

- **[Claim 57]** in response to the received price being unsatisfactory to the customer, communicating a customer specified price to at least one of the seller and manufacturer (Conklin et al.: col. 13, line 66 through to col. 14, line 31, Conklin et al. teach a multivariate negotiation engine for iterative bargaining. The system allows a buyer/participant to search and evaluate seller information, propose and negotiate orders and counteroffers that include all desired terms. The system provides comprehensive iterative bargaining abilities for both buyers and sellers that enable them to negotiate all the terms and conditions of a transaction – not just the price.).
- **[Claim 58]** wherein the price received is in response to a customer specified availability date communicated to at least one of the seller and manufacturer (Conklin et al.: col. 13, line 66 through to col. 14, line 31, Conklin et al. teach a multivariate negotiation engine for iterative bargaining. The system allows a buyer/participant to search and evaluate seller information, propose and negotiate orders and counteroffers that include all desired terms. The system provides comprehensive iterative bargaining abilities for both buyers and sellers that enable them to negotiate all the terms and conditions of a transaction – not just the price. The examiner interprets the terms and condition to include availability date.).
- **[Claim 59]** wherein the price received is in response to a customer specified price communicated to at least one of the seller and manufacturer (Conklin et al.: col. 13, line 66 through to col. 14, line 31, Conklin et al. teach a multivariate negotiation engine for iterative bargaining. The system allows a buyer/participant to search and evaluate seller information, propose and negotiate orders and counteroffers that include all desired terms. The system provides comprehensive iterative bargaining abilities for both buyers and sellers that enable them to negotiate all the terms and conditions of a transaction – not just the price.).
- **[Claim 62]** wherein the pricing bill of materials is derived from the configuration bill of materials (Henson: Figure 1, col. 4, line 53 through to col. 5, line 5, col. 6, lines 55-65, Henson teaches the entire configurator is driven by the database. The configurator includes a pricing module. The examiner interprets that once a customer selects or configures their system the pricing module then established a price for the selected feature, therefore the pricing bill of material is derived from the configuration bill of material.).
- **[Claim 64]** the step of updating at least one of a manufacturing bill of materials, a pricing bill of materials, and a configuration bill of materials is based upon the accommodation data from the supplier (Henson: col. 5, line 55 through to col. 6, line 67, Henson teaches the configurator, shopping cart,

and checkout are part of the commerce application and are driven by the database. The customer via the online store builds a custom configured machine by selecting from the options listed on the configuration screen. Upon obtaining a desired configuration, a customer adds the configured system to the shopping cart. An on-line store application includes configuration, pricing, validation, shipment delay indication, and merchandising modules. The shipment delay indicator provides the customer with any lead-time warnings or shipment delays which would occur as a result of the selection of specific options. The warning icon and associated messaging are made present in the configurator once an update/refresh of the web page has been requested. Online shoppers can click on the warning icon and receive a manually maintained listing of all items currently marked as significantly extending system delivery with an estimated time to delivery. Kennedy: p. 7, lines 17-23, Kennedy teaches an entire distributed organization of suppliers and customers can be modeled along with the request and promises placed between them. In this way, planners can view, manage, and plan the activity of a whole network where the interfaces between elements must be formal (separate organizations)).

- **[Claim 75]** the received feature price is responsive to a customer specified availability date communicated to the seller and to the manufacturer (Conklin et al.: col. 13, line 66 through to col. 14, line 31, Conklin et al. teach a multivariate negotiation engine for iterative bargaining. The system allows a buyer/participant to search and evaluate seller information, propose and negotiate orders and counteroffers that include all desired terms. The system provides comprehensive iterative bargaining abilities for both buyers and sellers that enable them to negotiate all the terms and conditions of a transaction – not just the price.).
- **[Claim 115]** receiving from a supplier over the Internet an availability date that corresponds to a product feature selected by a customer, the supplier being a supplier to a seller, the customer being a customer of the seller (Henson: col. 2, lines 61-67, col. 3, lines 61-67, col. 6, lines 5-17 and 31-43, and col. 7, lines 1-12, Henson teaches a web-based online store using a computer system with a central processing unit. The online store application and system includes a configuration module and a user interface for enabling a custom configuration of a computer system based on the options selected according to a prescribed user input. A shipment delay indicator provides the customer with advance notice that a particular option will result in a shipment delay. The warning icon and associated messaging are made present in the configurator once an update/refresh of the web page has been requested, for example, through clicking on any of a number of store navigation or action buttons. Online shoppers can click on the warning icon and receive an estimated time to delivery. Kennedy: p. 4, lines 17-35 and p. 5, line 23 to p.



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6, line 4, Kennedy teaches the managing of a supply chain model represents a chain of supply, the supply chain model comprising: site models that represent sites having capacity and that manage material flow; and seller models that represents sellers and that manage forecasting and purchasing; wherein commitments between sites is modeled by requests and promises; and wherein the seller can post requests on behalf of sites in anticipation of future requests from the sites. The requesting facilities each store forecast orders in a memory of a computer at the requesting facility. The forecast orders include request information, which includes the quantity (or range of quantities) of product requests from the supplying facility and the date (or range of dates) it is needed. A master scheduling software system may be used to selectively plan use of, for example, manufacturing capacity or the supplying facility to meet selected forecast orders based on predetermined criteria. If a feasible and desirable plan can be devised that satisfies the request, then the supplier may make a promise to the customer that he supplier will satisfy the request. The promises to meet the selected forecast orders may be transmitted directly to the customers over a computer network.);

- in response to the availability date being unsatisfactory to the customer, communicating over the Internet a customer specified availability date to the supplier (Conklin et al.: col. 13, line 66 through to col. 14, line 31, Conklin et al. teaches a multivariate negotiation engine for iterative bargaining that enables participants such as a customer and supplier to search and evaluate supplier information, propose, and negotiate orders and counteroffers. All multiple variables such as prices, terms, conditions, etc. are iteratively negotiated with a customer. The examiner interprets availability date to be a term and/or condition.); and
- receiving from the supplier over the Internet an automated response including an accommodation based on the customer specified availability date (Conklin et al.: col. 13, line 66 through to col. 14, line 31, Conklin et al. teaches a multivariate negotiation engine for iterative bargaining that enables participants such as a customer and supplier to search and evaluate supplier information, propose, and negotiate orders and counteroffers. All multiple variables such as prices, terms, conditions, etc. are iteratively negotiated with a customer. The examiner interprets availability date to be a term and/or condition. Kennedy: p. 4, lines 17-35 and p. 5, line 23 to p. 6, line 13, Kennedy teaches the managing of a supply chain model represents a chain of supply, the supply chain model comprising: site models that represent sites having capacity and that manage material flow; and seller models that represents sellers and that manage forecasting and purchasing; wherein commitments between sites is modeled by requests and promises; and wherein the seller can post requests on behalf of sites in anticipation of future

requests from the sites. The requesting facilities each store forecast orders in a memory of a computer at the requesting facility. The forecast orders include request information, which includes the quantity (or range of quantities) of product requests from the supplying facility and the date (or range of dates) it is needed. A master scheduling software system may be used to selectively plan use of, for example, manufacturing capacity or the supplying facility to meet selected forecast orders based on predetermined criteria. If a feasible and desirable plan can be devised that satisfies the request, then the supplier may make a promise to the customer that he supplier will satisfy the request. The promises to meet the selected forecast orders may be transmitted directly to the customers over a computer network. Where customers are not willing to wait for a plan to be developed to get a promise, the supplying facility must create promises in advance that are available for immediate transfer to a customer. The Examiner interprets immediate to imply automatic.).

- **[Claim 116]** updating a bill of material to reflect the accommodation received from the supplier (Henson: col. 2, lines 61-67, col. 3, lines 61-67, col. 5, line 55 through to col. 6, line 43, and col. 7, lines 1-12, Henson teaches a web-based online store using a computer system with a central processing unit. The online store application and system includes a configuration module and a user interface for enabling a custom configuration of a computer system based on the options selected according to a prescribed user input. The configurator, shopping cart, and checkout are part of the commerce application and are driven by the database. The customer via the online store builds a custom configured machine by selecting from the options listed on the configuration screen. A shipment delay indicator provides the customer with advance notice that a particular option will result in a shipment delay. The warning icon and associated messaging are made present in the configurator once an update/refresh of the web page has been requested, for example, through clicking on any of a number of store navigation or action buttons. Online shoppers can click on the warning icon and receive an estimated time to delivery. Upon obtaining a desired configuration, a customer adds the configured system to the shopping cart. Inherently, as the customer selects the features desired, the in-process configuration or bill of material is updated.)
- **[Claim 117]** responsive to a customer selecting a feature of the product, receiving over the Internet at a seller an automated response including an availability date that corresponds to the selected feature, the automated response being from a manufacturer of the selected feature (Henson: col. 2, lines 61-67, col. 3, lines 61-67, col. 6, lines 5-17 and 31-43, and col. 7, lines 1-12, Henson teaches a web-based online store using a computer system with a central processing unit. The online store application and system

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includes a configuration module and a user interface for enabling a custom configuration of a computer system based on the options selected according to a prescribed user input. A shipment delay indicator provides the customer with advance notice that a particular option will result in a shipment delay. The warning icon and associated messaging are made present in the configurator once an update/refresh of the web page has been requested, for example, through clicking on any of a number of store navigation or action buttons. Online shoppers can click on the warning icon and receive an estimated time to delivery. Kennedy: p. 4, lines 17-35 and p. 5, line 23 to p. 6, line 4, Kennedy teaches the managing of a supply chain model represents a chain of supply, the supply chain model comprising: site models that represent sites having capacity and that manage material flow; and seller models that represents sellers and that manage forecasting and purchasing; wherein commitments between sites is modeled by requests and promises; and wherein the seller can post requests on behalf of sites in anticipation of future requests from the sites. The requesting facilities each store forecast orders in a memory of a computer at the requesting facility. The forecast orders include request information, which includes the quantity (or range of quantities) of product requests from the supplying facility and the date (or range of dates) it is needed. A master scheduling software system may be used to selectively plan use of, for example, manufacturing capacity or the supplying facility to meet selected forecast orders based on predetermined criteria. If a feasible and desirable plan can be devised that satisfies the request, then the supplier may make a promise to the customer that he supplier will satisfy the request. The promises to meet the selected forecast orders may be transmitted directly to the customers over a computer network.);

- responsive to the received availability date being unsatisfactory to the customer, communicating a customer specified availability date to the manufacturer (Conklin et al.: col. 13, line 66 through to col. 14, line 31, Conklin et al. teaches a multivariate negotiation engine for iterative bargaining that enables participants such as a customer and supplier to search and evaluate supplier information, propose, and negotiate orders and counteroffers. All multiple variables such as prices, terms, conditions, etc. are iteratively negotiated with a customer. The examiner interprets availability date to be a term and/or condition.)
- updating an in-process bill of materials to reflect the selected feature (Henson: col. 5, line 55 through to col. 6, line 30, Henson teaches the configurator, shopping cart, and checkout are part of the commerce application and are driven by the database. The customer via the online store builds a custom configured machine by selecting from the options listed on the configuration screen. Upon obtaining a desired configuration, a customer

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- adds the configured system to the shopping cart. Inherently, as the customer selects the features desired, the in-process configuration or bill of material is updated.); and
- in response to the customer being satisfied with a set of sales parameters including the availability date of the selected feature, submitting a completed bill of materials to the manufacturer over the Internet (Henson: col. 5, line 55 through to col. 6, line 30, Henson teaches the configurator, shopping cart, and checkout are part of the commerce application and are driven by the database. The customer via the online store builds a custom configured machine by selecting from the options listed on the configuration screen. Upon obtaining a desired configuration, a customer adds the configured system to the shopping cart. Implicitly, when the customer finishes selection of the features and moves the selection to the shopping cart, the product configuration or bill of material is completed. Kennedy: p. 4, lines 17-35 and p. 5, line 23 to p. 6, line 4, Kennedy teaches the managing of a supply chain model represents a chain of supply, the supply chain model comprising: site models that represent sites having capacity and that manage material flow; and seller models that represents sellers and that manage forecasting and purchasing; wherein commitments between sites is modeled by requests and promises; and wherein the seller can post requests on behalf of sites in anticipation of future requests from the sites. The requesting facilities each store forecast orders in a memory of a computer at the requesting facility. The forecast orders include request information, which includes the quantity (or range of quantities) of product requests from the supplying facility and the date (or range of dates) it is needed. A master scheduling software system may be used to selectively plan use of, for example, manufacturing capacity or the supplying facility to meet selected forecast orders based on predetermined criteria. If a feasible and desirable plan can be devised that satisfies the request, then the supplier may make a promise to the customer that he supplier will satisfy the request. The promises to meet the selected forecast orders may be transmitted directly to the customers over a computer network.).
  - **[Claim 120]** wherein the step of communicating a customer specified availability date to the manufacturer is followed by receiving from the manufacturer an automated response including an accommodation in response to the customer specified availability date (Conklin et al.: col. 13, line 66 through to col. 14, line 31, Conklin et al. teach a multivariate negotiation engine for iterative bargaining. The system allows a buyer/participant to search and evaluate seller information, propose and negotiate orders and counteroffers that include all desired terms. The system provides comprehensive iterative bargaining abilities for both buyers and sellers that enable them to negotiate all the terms and conditions of a

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transaction – not just the price. The examiner interprets terms to include availability date.).

- **[Claim 121]** receiving at a seller a feature selection by the customer (Henson: col. 2, lines 61-67, and col. 6, lines 31-43, Henson teaches an online store application and system which includes a configuration module. The web-based online store has a user interface for enabling a custom configuration of a computer system based on the options selected according to a prescribed user input.);
- updating an inventory library based upon the received selection to reflect constraints imposed by the received selection (Henson: col. 5, line 55 through to col. 6, line 67, Henson teaches the configurator, shopping cart, and checkout are part of the commerce application and are driven by the database. The customer via the online store builds a custom configured machine by selecting from the options listed on the configuration screen. Upon obtaining a desired configuration, a customer adds the configured system to the shopping cart. An on-line store application includes configuration, pricing, validation, shipment delay indication, and merchandising modules. The shipment delay indicator provides the customer with any lead-time warnings or shipment delays which would occur as a result of the selection of specific options. The warning icon and associated messaging are made present in the configurator once an update/refresh of the web page has been requested. Online shoppers can click on the warning icon and receive a manually maintained listing of all items currently marked as significantly extending system delivery with an estimated time to delivery. The examiner interprets a shipping delay to be a constraint.);
- providing the received selection to a supplier, the supplier being a supplier of the feature to the seller (Henson: col. 4, lines 53-62 and col. 6, lines 31-67, Henson teaches an enhanced online store user interface which enables the system configuration, pricing, and ordering of a computer system via the Internet. Kennedy: p. 4, lines 17-35 and p. 5, line 23 to p. 6, line 4, Kennedy teaches the managing of a supply chain model represents a chain of supply, the supply chain model comprising: site models that represent sites having capacity and that manage material flow; and seller models that represents sellers and that manage forecasting and purchasing; wherein commitments between sites is modeled by requests and promises; and wherein the seller can post requests on behalf of sites in anticipation of future requests from the sites. The requesting facilities each store forecast orders in a memory of a computer at the requesting facility. The forecast orders include request information, which includes the quantity (or range of quantities) of product requests from the supplying facility and the date (or range of dates) it is needed. A master scheduling software system may be used to selectively

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- plan use of, for example, manufacturing capacity or the supplying facility to meet selected forecast orders based on predetermined criteria. If a feasible and desirable plan can be devised that satisfies the request, then the supplier may make a promise to the customer that he supplier will satisfy the request. The promises to meet the selected forecast orders may be transmitted directly to the customers over a computer network.);
- receiving information from the supplier comprising at least one of availability date and price for the received selection (Henson: col. 6, lines 18-67, Henson teaches the pricing option module includes an update price function that causes the price displayed on the configuration screen to reflect any changes made to the system options. A shipment delay indicator provides the customer with any lead-time warnings or shipment delays which would occur as a result of the selection of specific options. Online shoppers can click on a long lead time icon that is displayed adjacent to each item affected and receive and estimated time to delivery.);
  - where customer desires are not satisfied, providing at least one of a customer desired availability date and a customer desired price for the received selection (Conklin et al.: col. 13, line 66 through to col. 14, line 31, Conklin et al. teaches a multivariate negotiation engine for iterative bargaining that enables participants such as a customer and supplier to search and evaluate supplier information, propose, and negotiate orders and counteroffers. All multiple variables such as prices, terms, conditions, etc. are iteratively negotiated with a customer. The examiner interprets availability date to be a term and/or condition.);
  - displaying accommodation data from the supplier corresponding to the customer desires (Conklin et al.: col. 13, line 66 through to col. 14, line 31, Conklin et al. teaches a multivariate negotiation engine for iterative bargaining that enables participants such as a customer and supplier to search and evaluate supplier information, propose, and negotiate orders and counteroffers. All multiple variables such as prices, terms, conditions, etc. are iteratively negotiated with a customer. The examiner interprets availability date to be a term and/or condition.); and
  - updating at least one of a manufacturing bill of materials, a pricing bill of materials, and a configuration bill of materials based on the selection (Henson: col. 5, line 55 through to col. 6, line 30, Henson teaches the configurator, shopping cart, and checkout are part of the commerce application and are driven by the database. The customer via the online store builds a custom configured machine by selecting from the options listed on the configuration screen. Upon obtaining a desired configuration, a customer adds the configured system to the shopping cart. Inherently, as the customer

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selects the features desired, the in-process configuration or configuration bill of material is updated.).

- **[Claim 128]** providing to a customer a selectable feature and at least one of price and availability date of the selectable feature (Henson: col. 2, lines 61-67, and col. 6, lines 18-67, Henson teaches an online store application and system which includes a configuration module. The web-based online store has a user interface for enabling a custom configuration of a computer system based on the options selected according to a prescribed user input. A pricing option module includes an update price function that causes the price displayed on the configuration screen to reflect any changes made to the system options. A shipment delay indicator provides the customer with any lead-time warnings or shipment delays which would occur as a result of the selection of specific options. Online shoppers can click on a long lead time icon that is displayed adjacent to each item affected and receive and estimated time to delivery.);
- conveying to the supplier at least one of a customer desired availability date and a customer desired price (Conklin et al.: col. 13, line 66 through to col. 14, line 31, Conklin et al. teaches a multivariate negotiation engine for iterative bargaining that enables participants such as a customer and supplier to search and evaluate supplier information, propose, and negotiate orders and counteroffers. All multiple variables such as prices, terms, conditions, etc. are iteratively negotiated with a customer. The examiner interprets availability date to be a term and/or condition.); and
- supplying an automated response to a seller, the automated response including an accommodation from the supplier based on the at least one of a customer desired availability date and a customer desired price (Conklin et al.: col. 13, line 66 through to col. 14, line 31, Conklin et al. teaches a multivariate negotiation engine for iterative bargaining that enables participants such as a customer and supplier to search and evaluate supplier information, propose, and negotiate orders and counteroffers. All multiple variables such as prices, terms, conditions, etc. are iteratively negotiated with a customer. The examiner interprets availability date to be a term and/or condition.).
- **[Claim 129]** the customer is chosen from a set consisting of a retailer, wholesaler, manufacturer and distributor, of the product (Henson: col. 13, line 6-28, Henson teaches a personal and business customer where a business online store is created. The examiner interprets a business to any one of a retailer, wholesaler, manufacturer, or distributor.).

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- **Claim 130]** the supplier is chosen from a set consisting of a retailer, wholesaler, manufacturer, distributor and vendor, of the product (Kennedy: p. 5, lines 15-17, and p. 7, lines 17-20, Kennedy teaches an entire distributed organization of suppliers and customers can be modeled along with the requests and promises placed between them. The distributed organization comprises at least one supplying facility such as a factory. The Examiner interprets factory to be a manufacturer.)

**Claims 65, 67, 88-90, 93-95, 100-102, 114, 122, 124 and 127** recite substantially the same limitations as that of claims 52-54, 57-59, 62, 64 and 117 with the distinction of the recited method being a method and a system. Hence the same rejection for claims 52-54, 57-59, 62 and 64 as applied above applies to claims 65, 67, 88-90, 93-95, 100-102, 122 and 124.

35. **Claims 61, 63, 66, 97, 108, and 123** are rejected under 35 U.S.C. 103(a) as being unpatentable over Henson (U.S. Patent 6,167,383), Kennedy (UK Patent Application GB 2,302,427 A) and Conklin et al. (U.S. Patent 6,141,653) in view of Teresko et al. (Teresko et al., Calico Technology : Concinity Configuration/Quotation System, Industry Week, Vol. 245, Issue 23, 16 December 1996 [PROQUEST]). Henson, Kennedy and Conklin et al. disclose extended product configuration techniques comprising:

- **[Claim 123]** receiving at a seller a feature selection by the customer (Henson: col. 2, lines 61-67, and col. 6, lines 31-43, Henson teaches an online store application and system which includes a configuration module. The web-based online store has a user interface for enabling a custom configuration of a computer system based on the options selected according to a prescribed user input.);
- updating an inventory library based upon the received selection to reflect constraints imposed by the received selection (Henson: col. 5, line 55 through to col. 6, line 67, Henson teaches the configurator, shopping cart, and



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checkout are part of the commerce application and are driven by the database. The customer via the online store builds a custom configured machine by selecting from the options listed on the configuration screen. Upon obtaining a desired configuration, a customer adds the configured system to the shopping cart. An on-line store application includes configuration, pricing, validation, shipment delay indication, and merchandising modules. The shipment delay indicator provides the customer with any lead-time warnings or shipment delays which would occur as a result of the selection of specific options. The warning icon and associated messaging are made present in the configurator once an update/refresh of the web page has been requested. Online shoppers can click on the warning icon and receive a manually maintained listing of all items currently marked as significantly extending system delivery with an estimated time to delivery. The examiner interprets a shipping delay to be a constraint.);

- providing the received selection to a supplier, the supplier being a supplier of the feature to the seller (Henson: col. 4, lines 53-62 and col. 6, lines 31-67, Henson teaches an enhanced online store user interface which enables the system configuration, pricing, and ordering of a computer system via the Internet. Kennedy: p. 4, lines 17-35 and p. 5, line 23 to p. 6, line 4, Kennedy teaches the managing of a supply chain model represents a chain of supply, the supply chain model comprising: site models that represent sites having capacity and that manage material flow; and seller models that represents sellers and that manage forecasting and purchasing; wherein commitments between sites is modeled by requests and promises; and wherein the seller can post requests on behalf of sites in anticipation of future requests from the sites. The requesting facilities each store forecast orders in a memory of a computer at the requesting facility. The forecast orders include request information, which includes the quantity (or range of quantities) of product requests from the supplying facility and the date (or range of dates) it is needed. A master scheduling software system may be used to selectively plan use of, for example, manufacturing capacity or the supplying facility to meet selected forecast orders based on predetermined criteria. If a feasible and desirable plan can be devised that satisfies the request, then the supplier may make a promise to the customer that he supplier will satisfy the request. The promises to meet the selected forecast orders may be transmitted directly to the customers over a computer network.);
- receiving information from the supplier comprising at least one of availability date and price for the received selection (Henson: col. 6, lines 18-67, Henson teaches the pricing option module includes an update price function that causes the price displayed on the configuration screen to reflect any changes made to the system options. A shipment delay indicator provides the customer with any lead-time warnings or shipment delays which would occur

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as a result of the selection of specific options. Online shoppers can click on a long lead time icon that is displayed adjacent to each item affected and receive and estimated time to delivery.);

- where customer desires are not satisfied, providing at least one of a customer desired availability date and a customer desired price for the received selection (Conklin et al.: col. 13, line 66 through to col. 14, line 31, Conklin et al. teaches a multivariate negotiation engine for iterative bargaining that enables participants such as a customer and supplier to search and evaluate supplier information, propose, and negotiate orders and counteroffers. All multiple variables such as prices, terms, conditions, etc. are iteratively negotiated with a customer. The examiner interprets availability date to be a term and/or condition.);
- displaying accommodation data from the supplier corresponding to the customer desires (Conklin et al.: col. 13, line 66 through to col. 14, line 31, Conklin et al. teaches a multivariate negotiation engine for iterative bargaining that enables participants such as a customer and supplier to search and evaluate supplier information, propose, and negotiate orders and counteroffers. All multiple variables such as prices, terms, conditions, etc. are iteratively negotiated with a customer. The examiner interprets availability date to be a term and/or condition.); and
- updating at least one of a manufacturing bill of materials, a pricing bill of materials, and a configuration bill of materials based on the selection (Henson: col. 5, line 55 through to col. 6, line 30, Henson teaches the configurator, shopping cart, and checkout are part of the commerce application and are driven by the database. The customer via the online store builds a custom configured machine by selecting from the options listed on the configuration screen. Upon obtaining a desired configuration, a customer adds the configured system to the shopping cart. Inherently, as the customer selects the features desired, the in-process configuration or configuration bill of material is updated.).

Henson, Kennedy and Conklin et al. fail to teach wherein the pricing bill of material is derived from the manufacturing bill of materials. Teresko et al. teach Calico Technology's introduction in early 1996 of Release 7.7 of its highly sophisticated sales quotation and configuration software enables manufacturers to extend their enterprise-resource-planning (ERP) systems out to the Internet. More than a mere "product

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selector", the Calico software enables customers to browse a vendor's options, configure their selection, and buy complex products or services online without a sales representative. The Calico software integrates with ERP systems and automatically translates bills of materials into constraint and rule-based models that can rapidly be deployed on the Internet by companies with rapidly changing product lines. It eliminates the need for sales and manufacturing to maintain separate configurations systems (p. 24 and 26). The Examiner interprets the manufacturing bill of material, i.e. in the ERP system, is used to sell product to the customers, i.e. price, therefore the pricing bill of material is derived from the manufacturing bill of materials. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to include Calico's sales quotation and configuration software with the teachings of Henson, Kennedy and Conklin et al. since Henson teaches a web-based online store that includes a configurator (Abstract). Customers want more responsiveness and immediate responses to product or service requests. Kennedy teaches managing available-to-promise where making promises to fulfill customer requests includes a supply chain model; such that a list of all matching products and associated available promises can be displayed as available-to-promise for the request. The promises to meet the selected forecast orders may be transmitted directly to the customers over a computer network. (Abstract, p. 5, lines 10-12. p. 6, lines 2-4). Henson teaches the online store is optimized for responsiveness (availability and speed) to customer requests and for completeness in servicing of customer demands for personal computer information (col. 3, lines 51-54). Teresko et al. teach extended their enterprise-

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resource-planning (ERP) systems out to the Internet. Concinity provides "a truly interactive user experience where every click of the mouse gets instant, click-by-click feedback" (p. 24 and 26). Therefore there is motivation to combine since the references are configuring product online and using a supply chain planning system to be more responsiveness to customer requests with immediate product or service responses; and there is a reasonable expectation of success. All the claim limitations of the claim are taught by the combined references.

- **[Claim 61]** in response to the price of the selected feature being determined on the configuration side, deriving an in-process pricing bill of materials from the in-process bill of materials, wherein the in-process pricing bill of materials reflects the price of the selected feature (Henson: col. 2, lines 61-67, and col. 6, lines 18-67, Henson teaches an online store application and system which includes a configuration module. The web-based online store has a user interface for enabling a custom configuration of a computer system based on the options selected according to a prescribed user input. The pricing option module includes an update price function that causes the price displayed on the configuration screen to reflect any changes made to the system options. A shipment delay indicator provides the customer with any lead-time warnings or shipment delays which would occur as a result of the selection of specific options. Online shoppers can click on a long lead time icon that is displayed adjacent to each item affected and receive an estimated time to delivery. Teresko et al.: p. 24 and 26, Teresko et al. teach Calico Technology's introduction in early 1996 of Release 7.7 of its highly sophisticated sales quotation and configuration software enables manufacturers to extend their enterprise-resource-planning (ERP) systems out to the Internet. More than a mere "product selector", the Calico software enables customers to browse a vendor's options, configure their selection, and buy complex products or services online without a sales representative. The Calico software integrates with ERP systems and automatically translates bills of materials into constraint and rule-based models that can rapidly be deployed on the Internet by companies with rapidly changing product lines. It eliminates the need for sales and manufacturing to maintain separate configurations systems. The Examiner interprets that "in-process" means that the customer is in the process of selecting product features, but is not finished and that the quotation system gives prices for the product with the selected features. The constraint and rule-based bills of materials and sales and manufacturing

- using the same configurator means the in-process bill of materials reflect the price since the same configurator is being used to sell the product.); and
- in response to the price of the selected feature being determined on the resource planning side, deriving the in-process pricing bill of materials from an in-process manufacturing bill of materials that is derived from the in-process bill of materials and reflects the received availability date of the selected feature (Henson: col. 2, lines 61-67, and col. 6, lines 18-67, Henson teaches an online store application and system which includes a configuration module. The web-based online store has a user interface for enabling a custom configuration of a computer system based on the options selected according to a prescribed user input. The pricing option module includes an update price function that causes the price displayed on the configuration screen to reflect any changes made to the system options. A shipment delay indicator provides the customer with any lead-time warnings or shipment delays which would occur as a result of the selection of specific options. Online shoppers can click on a long lead time icon that is displayed adjacent to each item affected and receive an estimated time to delivery. Teresko et al.: p. 24 and 26, Teresko et al. teach Calico Technology's introduction in early 1996 of Release 7.7 of its highly sophisticated sales quotation and configuration software enables manufacturers to extend their enterprise-resource-planning (ERP) systems out to the Internet. More than a mere "product selector", the Calico software enables customers to browse a vendor's options, configure their selection, and buy complex products or services online without a sales representative. The Calico software integrates with ERP systems and automatically translates bills of materials into constraint and rule-based models that can rapidly be deployed on the Internet by companies with rapidly changing product lines. It eliminates the need for sales and manufacturing to maintain separate configurations systems. The Examiner interprets that "in-process" means that the customer is in the process of selecting product features, but is not finished and that the quotation system gives prices for the product with the selected features. The constraint and rule-based bills of materials and sales and manufacturing using the same configurator means the in-process bill of materials reflect the price since the same configurator is being used to sell the product as is being used in the ERP system by manufacturing.).
  - **[Claim 63]** the pricing bill of materials is derived from the manufacturing bill of materials (Teresko et al.: p. 24 and 26, Teresko et al. teach Calico Technology's introduction in early 1996 of Release 7.7 of its highly sophisticated sales quotation and configuration software enables manufacturers to extend their enterprise-resource-planning (ERP) systems out to the Internet. More than a mere "product selector", the Calico software enables customers to browse a vendor's options, configure their selection,

and buy complex products or services online without a sales representative. The Calico software integrates with ERP systems and automatically translates bills of materials into constraint and rule-based models that can rapidly be deployed on the Internet by companies with rapidly changing product lines. It eliminates the need for sales and manufacturing to maintain separate configurations systems. The Examiner interprets that the quotation system gives prices for the product with the selected features. The constraint and rule-based bills of materials and sales and manufacturing using the same configurator means the manufacturing bill of materials is being used to sell the product, therefore the price is derived from the manufacturing bill of materials.).

**Claims 66, 97 and 108** substantially recite the same limitations as that of claims 61 and 63 with the distinction of the recited method being another method and system. Hence the same rejection for claims 61 and 63 as applied above applies to claims 66, 97 and 108.

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**Conclusion**

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Michael C. Heck whose telephone number is (571) 272-6730. The Examiner can normally be reached Monday thru Friday between the hours of 8:30am - 4:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq R. Hafiz can be reached on (571) 273-6729.

Any response to this action should be mailed to:

**Director of the United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, Virginia 22313-1450**

Or faxed to:

**(571) 273-8300**

[Official communications; including After Final communications labeled "**Box AF**"]

**(571) 273-6730**

[Informal/Draft communication, labeled "**PROPOSED**" or "**DRAFT**"]

*mch*  
mch

2 August 2005

*Susanne Diaz*

**SUSANNA M. DIAZ  
PRIMARY EXAMINER**

*AU 3623*